CE

dirna Air conditioning for vehicles — Bergstrom Climate Control Systems

bycool green line

COMPACT 3.0

VOLVO

Instrucciones de Montaje — ES Spanish

Mounting Instructions — EN English

Instructions de Montage — FR French

Montageanweisungen — GE German

Istruzioni di Montaggio — IT Italian

AENOR ER Calidad en Automoción UNE-ISO/TS 16949

AENOR ER Empresa Registrada ER-0022/1/99

IQNet CERTIFIED QUALITY SYSTEM

F-4218 rev.01

220AA23001

Recomendaciones Para el montaje

- Antes de iniciar el montaje leer las instrucciones y seguirlas durante el proceso de instalacion.
- Usar las herramientas adecuadas para cada operación.

Electricidad

- Desconectar la llave de contacto.
- Desconectar la batería antes de empezar el montaje.
- Asegurar el conexionado de los componentes eléctricos, verificando su correcto encaje.

⚠ Atención

Si durante el montaje el equipo se inclina, se deberá esperar un mínimo de 60 minutos desde que el equipo quede en posición horizontal antes de ponerlo en funcionamiento.

⚠ Atención

Al instalar el equipo de aire acondicionado en el techo se debe proteger la parte superior de la cabina con un paño ó manta protectora para evitar posibles arañazos. Al instalar **Compact** en el techo hay que tener en cuenta que, normalmente, las cabinas que vienen provistas de escotilla, tienen una estructura suficiente para soportar el peso del equipo. Sin embargo, cuando no ocurra así y sea necesario realizar corte en el techo ó incluso si en el caso de llevar escotilla el material no es lo suficientemente resistente (caso de techo de fibra, plástico, etc...) es el instalador el que debe decidir, **bajo su responsabilidad**, sobre la necesidad de reforzar el techo para evitar posibles deformaciones, roturas, entradas de agua, etc... habilitando los medios para que esto no ocurra.

Herramientas

Juego de Llaves Torx
Juego de Llaves Allen
Llave fija 10, 13, 14
Tijeras
Flexómetro

Documentación incluída

Instrucciones de montaje	220.AA2.3001
Manual del usuario	220.AA6.0057
Diagnosis de averías	220.AA6.0058
Garantía	220.AA1.0017

Simbología

Frágil

Atención corte!

Riesgo eléctrico

⚠ Advertencias

⚠ El personal instalador debe poseer una formación suficiente en Aire Acondicionado de vehículos.

⚠ **dirna Bergstrom, .s.l.** queda exenta de responsabilidad si se producen averías que procedan de una inadecuada manipulación ó instalación del equipo, ó por modificaciones y sustituciones efectuadas sin nuestra expresa autorización por escrito.

⚠ **Equipo precargado con gas refrigerante.** en cada circuito. (***No manipular el circuito de gas refrigerante***).

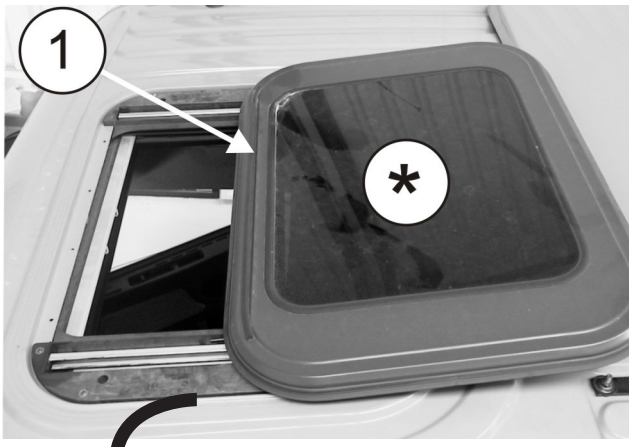
⚠ Véase **procedimiento de garantía** del producto incluido en **Diagnosis de Averías**.

⚠ Véase **Manual de Usuario** del equipo para el correcto funcionamiento del mando a distancia y del panel de control.

⚠ Al finalizar la instalación se debe entregar al usuario: **Manual del Usuario**, **Garantía** y **Diagnosis de averías**.

⚠ Antes de empezar con el montaje, montar rejilla entrada aire delantera.

1 Desmontar tapa escotilla, marco interior y entregar al cliente



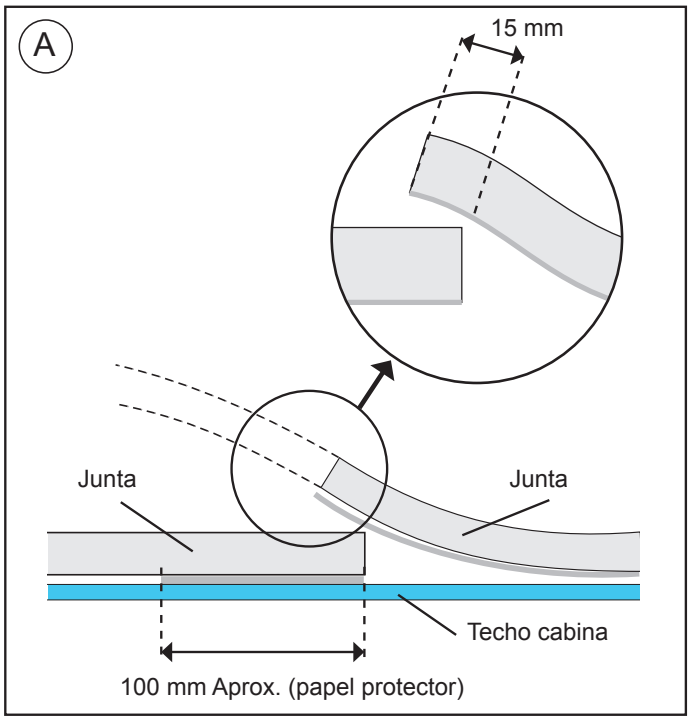
2 Pegar junta EPDM de 30x25mm, alrededor del corte o del hueco de escotilla.

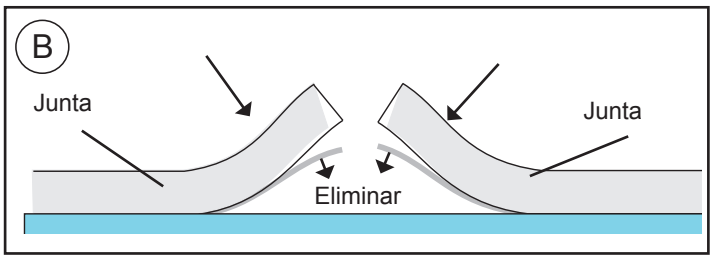
COMO CORTAR LA JUNTA EPDM PARA EVITAR FILTRACIÓN DE AGUA EN LA CABINA

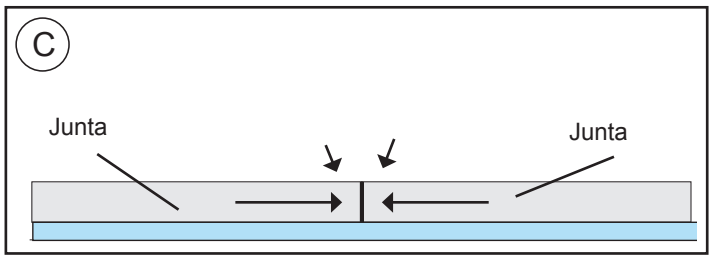
A- Pegar la junta, manteniendo 100 mm de papel protector por cada lado.

B- Quitar los dos piezas de papel.

C- Pegue presionado ambos finales.





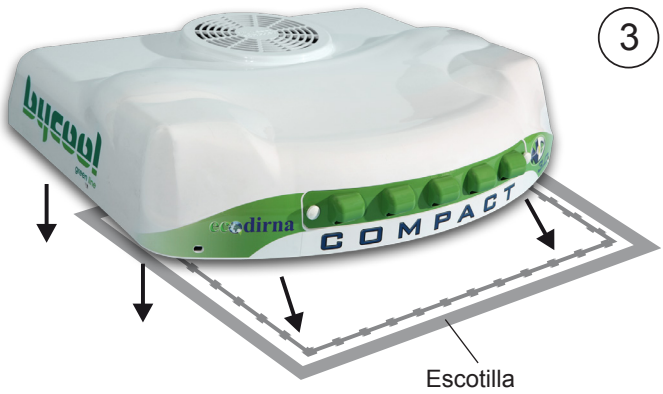


3

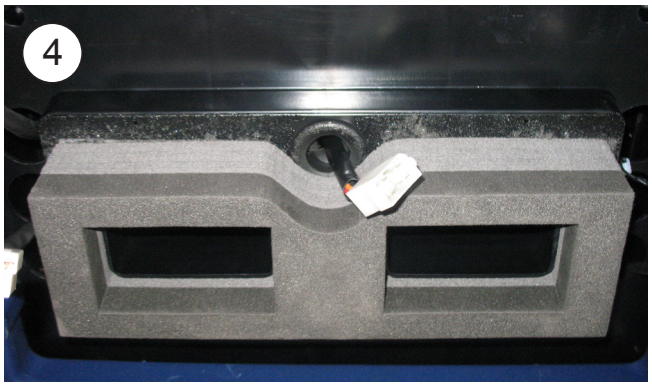
EXTERIOR CABINA:

Posicionar el Compact en el hueco de la escotilla.

¡Atención! Al colocar el equipo encima del hueco escotilla, revisar que las salidas de desagüe no queden obstruidas por la junta EPDM.

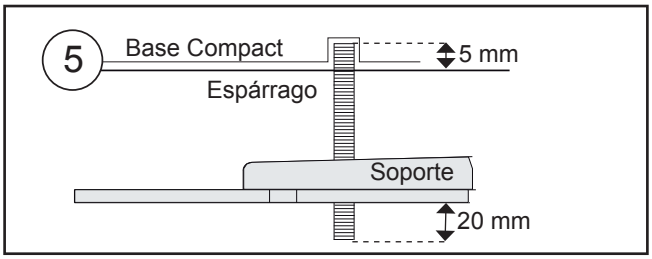


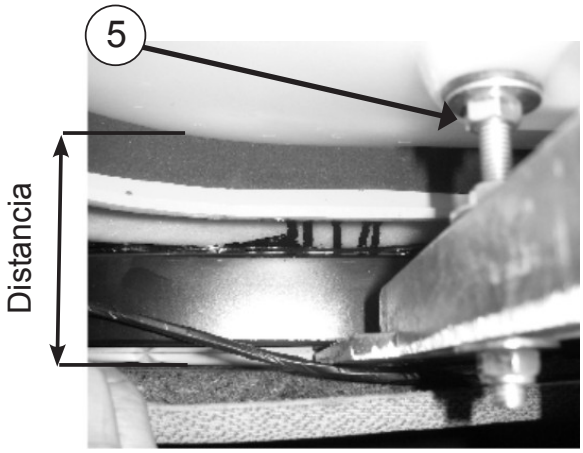
4 Colocar canalizador gomaespuma quedando la parte más blanda en la base del equipo.



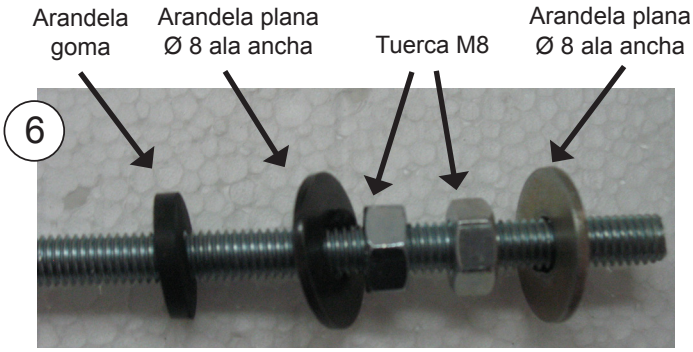
5 **INTERIOR CABINA:**

Roscar 5 mm aproximadamente (4) espárragos 8/125x100-70 ó 120, la medida se elegirá tras presentar los soportes de sujección y teniendo en cuenta que los espárragos deben sobresalir de los mismos por la parte inferior unos 20 mm.

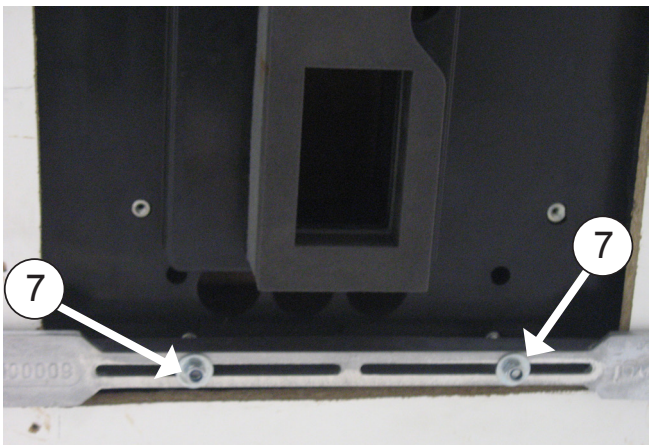




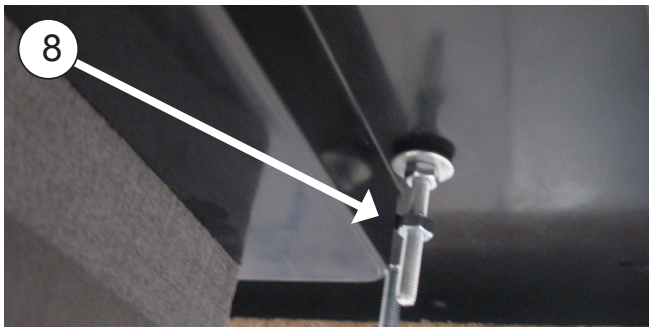
6 Colocar (1) arandela Ø 7 de goma, (1) arandela plana Ø 8 ala ancha, (2) tuerca M8 y (1) arandela plana Ø 8 ala ancha , en cada uno de los espárragos anteriores; siguiendo dicho orden.

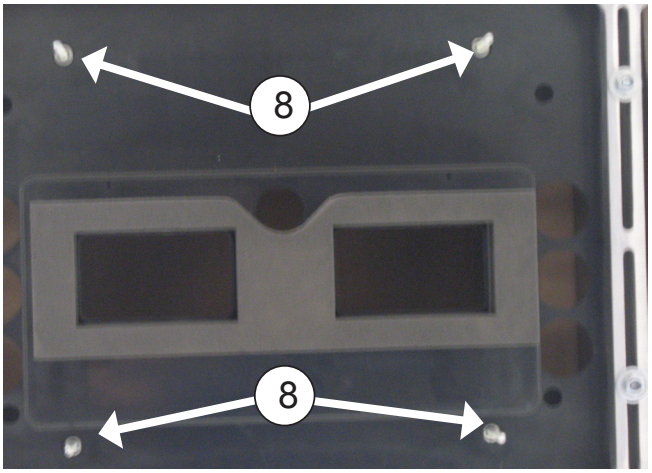


7 Colocar (2) soportes sujeción, con (1) arandela y (1) tuerca autoblocante M8, **sin llegar a apretar**.

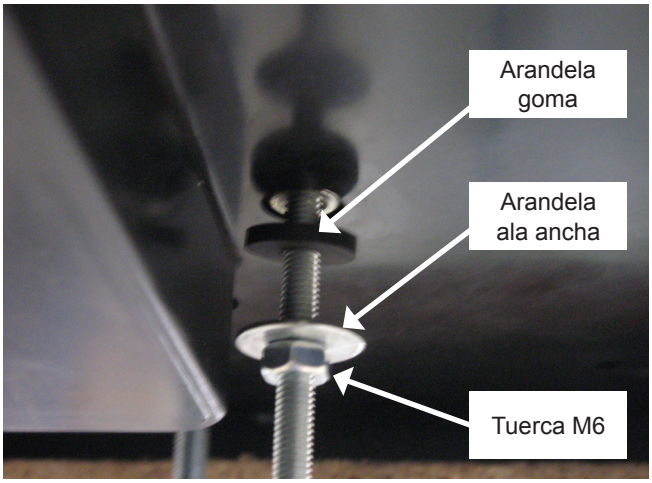


8 Roscar 10 mm (4) espárragos M6, donde se indica, según distancia (D) del esquema del punto 10.

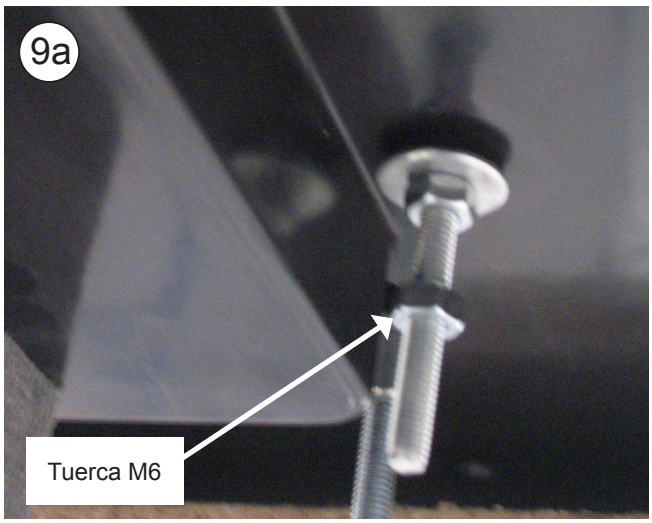




9 Colocar (1) arandela Ø6 de goma, (1) arandela plana Ø6 ala ancha y (1) tuerca M6, sobre cada uno de los espárragos de M6. A continuación apretar la tuerca hasta que la arandela de goma quede un poco oprimida.

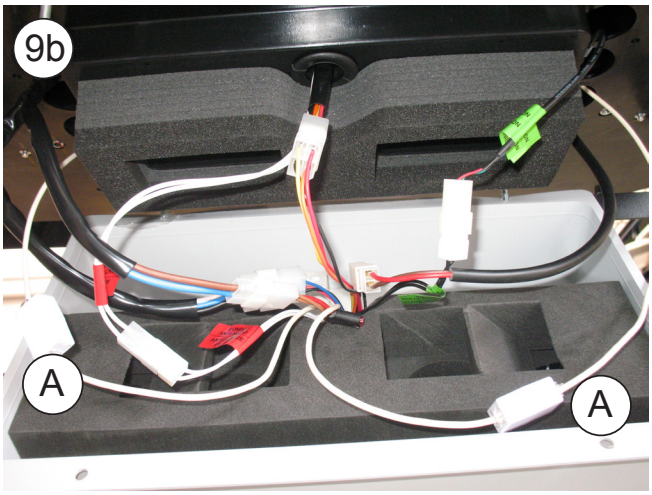


9a Colocar (1) tuerca M6 **sin apretar** en cada espárrago.

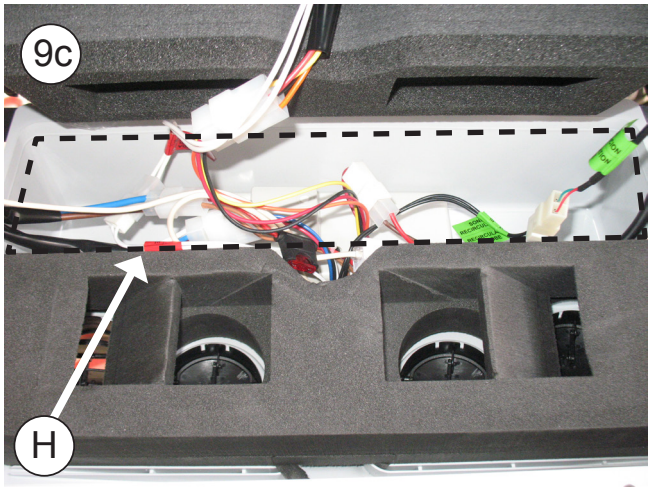


9b Conectar (2) cables de comunicación **(A)**, las (2) cajas de 4 vías y (4) de 2 vías; del frente con las del **Compact**.

Tener en cuenta que la caja de 2 vías marcada con cables blancos se une al conector con cables blancos que sale por la parte central del equipo.

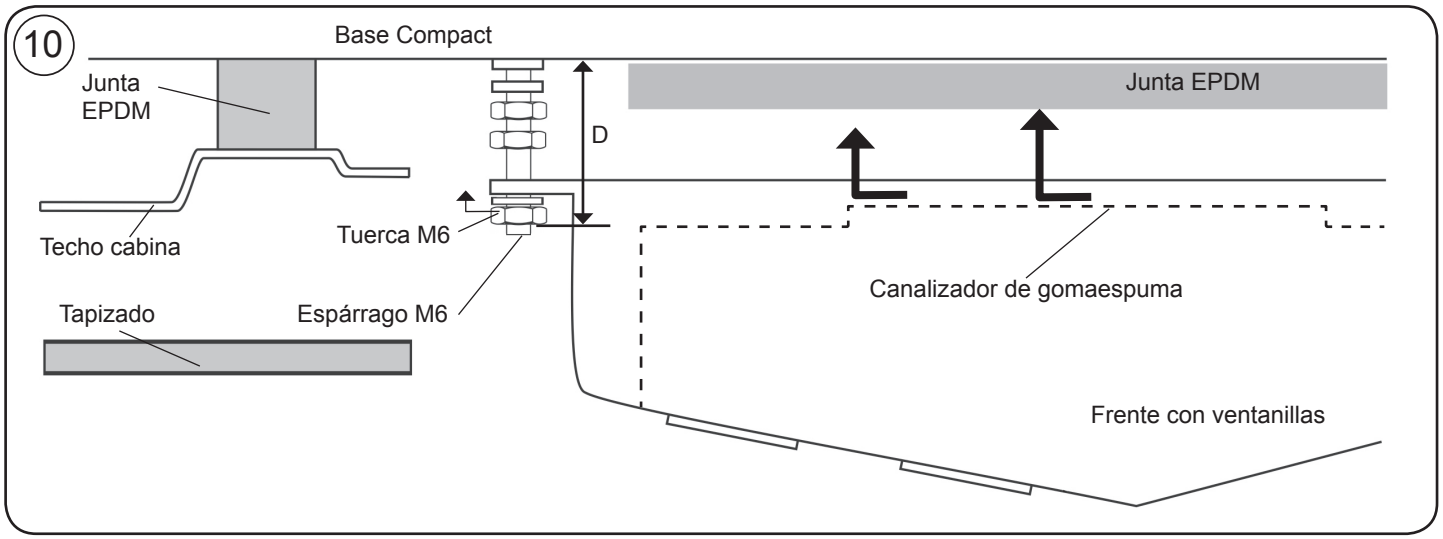


9c Introducir cableados en el hueco existente **(H)** en el frente para no interferir en el ajuste de los canalizadores con la base del equipo.

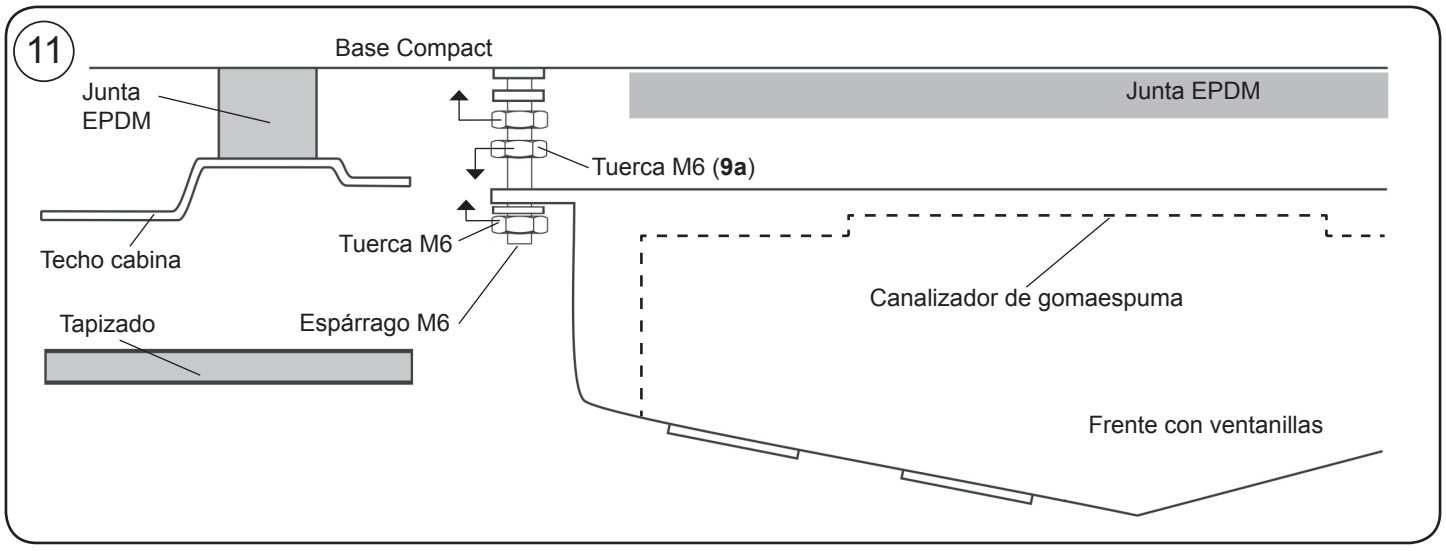


10 Colocar frente en los espárragos anteriores con (1) arandela M6 ala ancha y (1) tuerca M6 en cada espárrago. Apretar tuercas hasta que el canalizador de gomaespuma haga tope en goma espuma superior del equipo.

Importante: El canalizador de gomaespuma debe hacer tope contra la goma espuma superior del equipo para evitar fugas de aire.



11 Apretar tuerca del punto **9a** hasta hacer tope con la parte superior del frente.

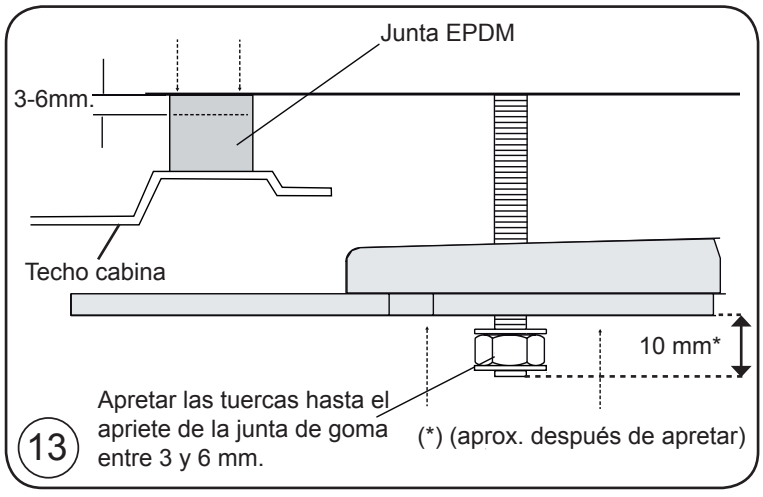


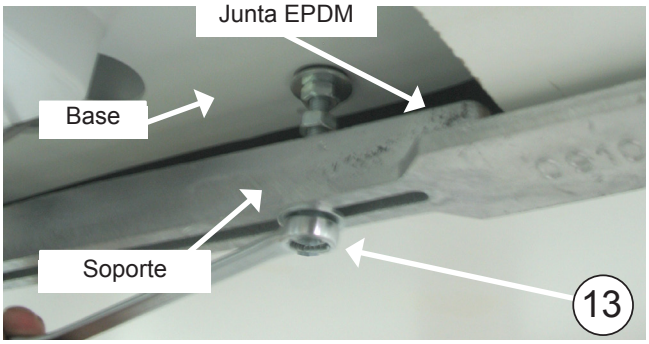
12 Presentar consola con tornillos originales y centrar el equipo en la posición mas idónea, hasta hacer coincidir los tornillos originales en su ubicación.

13 Fijar los soportes de sujección apretando las tuercas hasta el apriete de la junta de EPDM exterior del equipo entre 3 y 6mm.

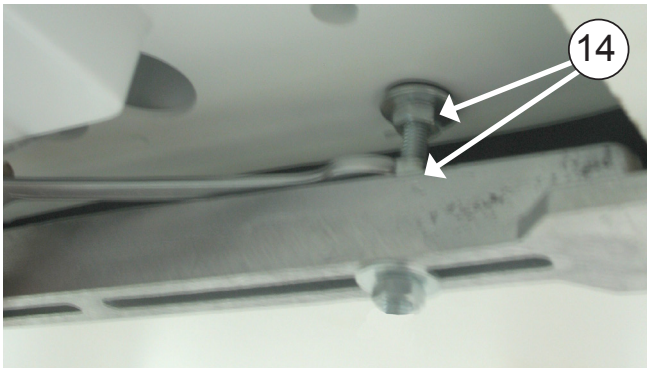
Importante: Para evitar posibles filtraciones de agua al interior de la cabina se debe asegurar el apriete de la junta EPDM con la base del Compact tal y como se indica en el **esquema**.

Comprobar la compresión de la junta EPDM usando un flexómetro en las cuatro esquinas.


Junta EPDM
3-6mm.
Techo cabina
10 mm*
Apretar las tuercas hasta el apriete de la junta de goma entre 3 y 6 mm.
(*) (aprox. después de apretar)
13

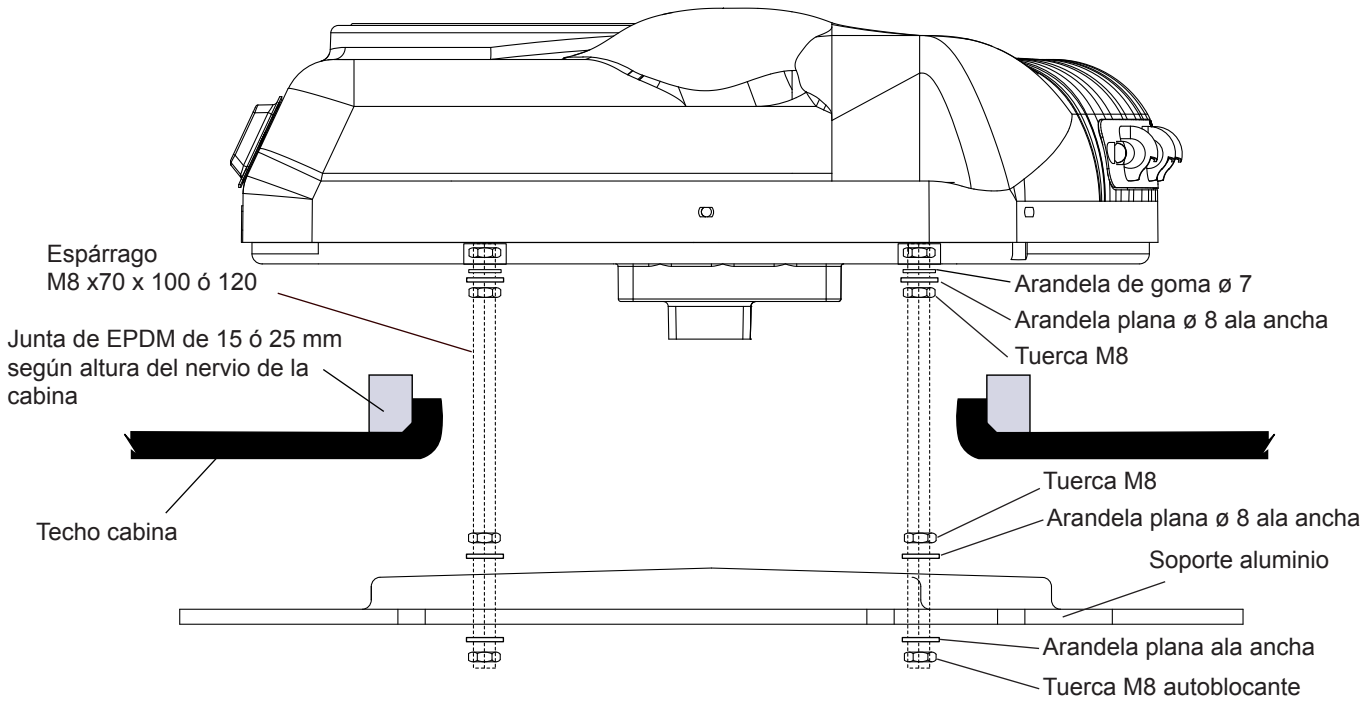


14 Apretar (4) tuercas M8 al soporte y (4) a la base del Compact.

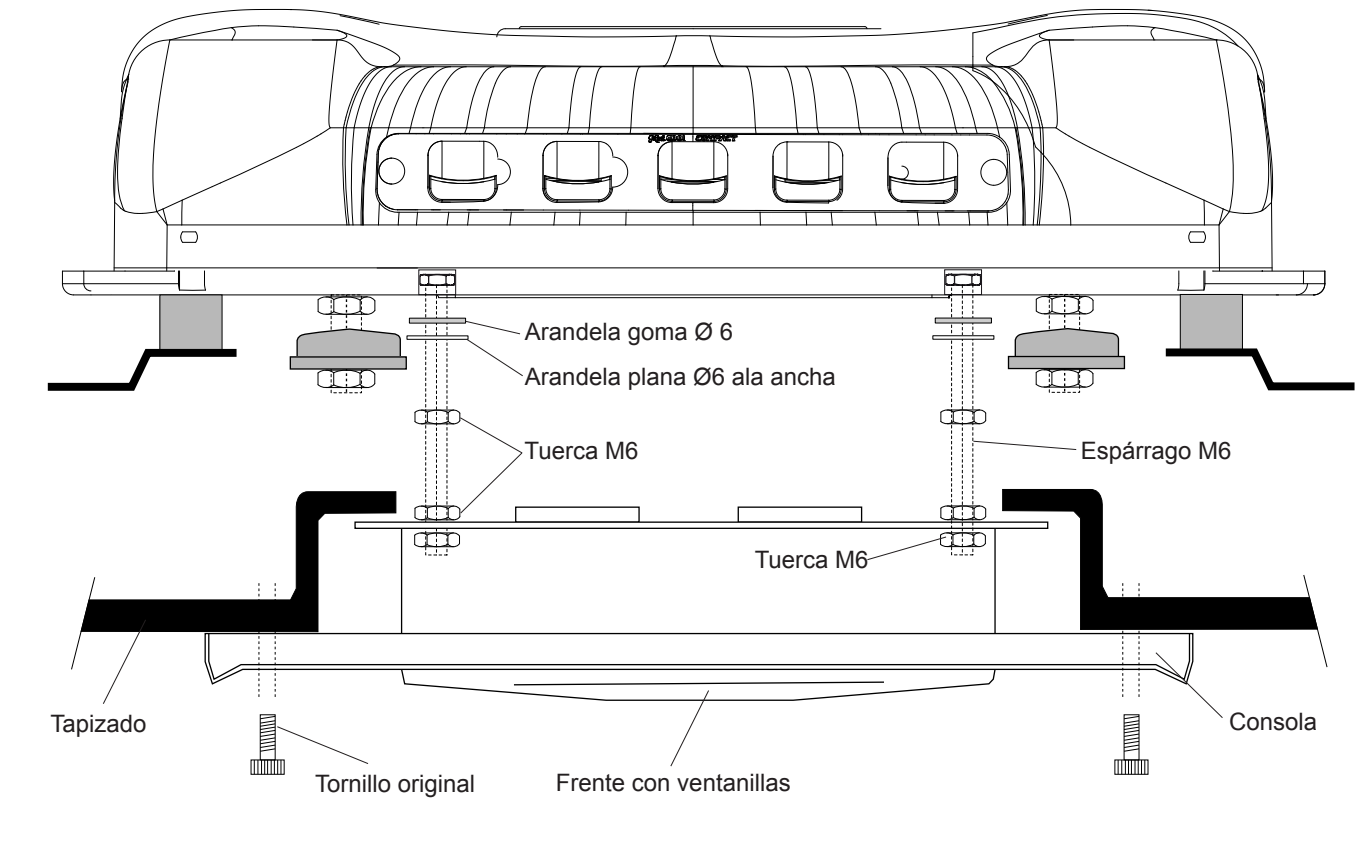


15	Colocar consola con (4) tornillos originales.

Vista explosionada hasta la fijación de los soportes

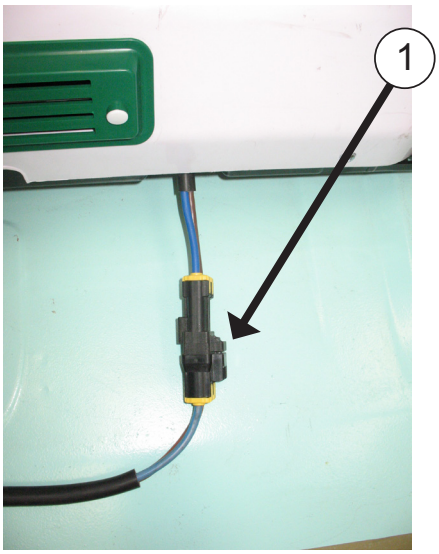


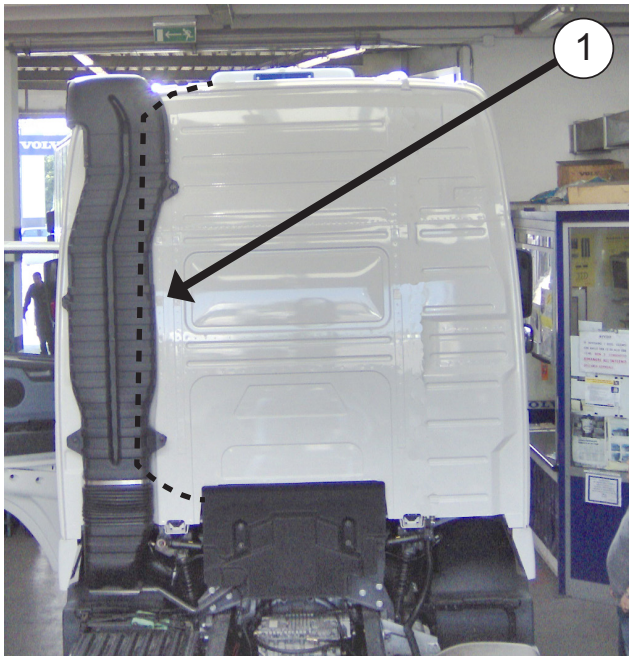
Vista explosionada hasta la fijación de las consolas



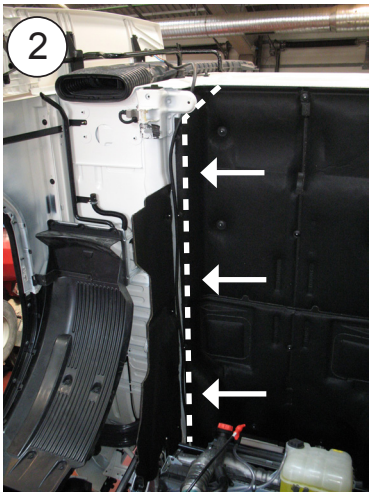
Instrucciones detalladas sobre instalación del cableado de alimentación

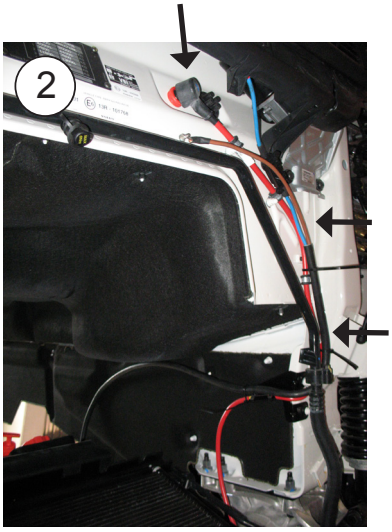
1 Conectar clema del cable de alimentación con la clema del equipo y pasar cableado por detrás del tubo de admisión.

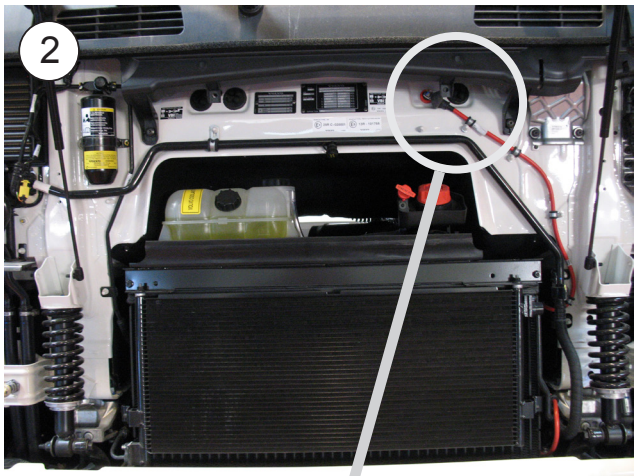


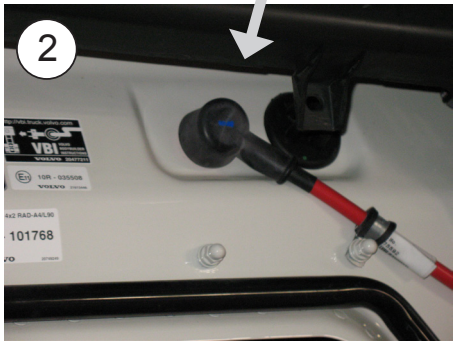


2 Abatir cabina y llevar cable por el lugar indicado hasta la toma de positivo situada en la parte delantera de la cabina.

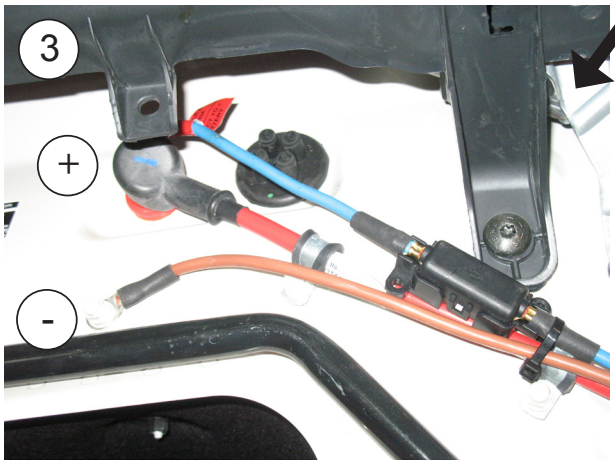


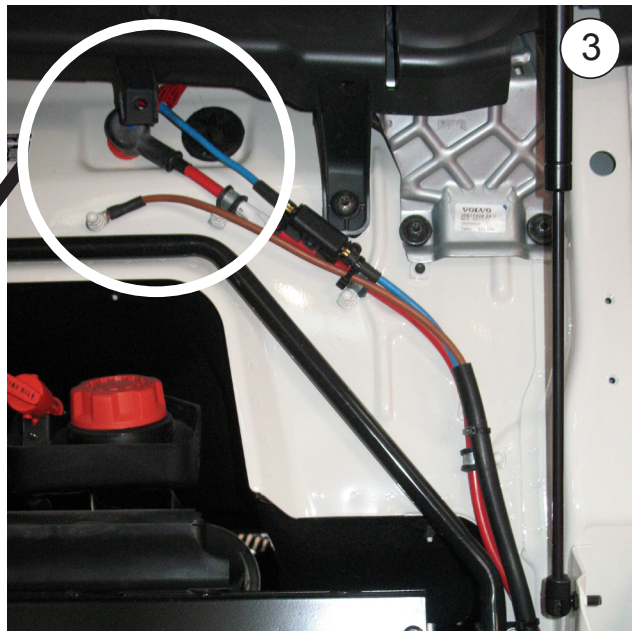




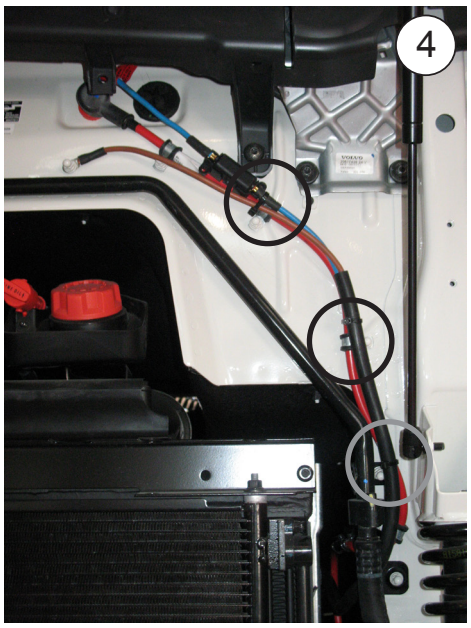


3 Desmontar tuerca M6 y tuerca M8 de toma (+) y conectar cableado de alimentación como se indica.





4 Fijar cableado con bridas a cable original.



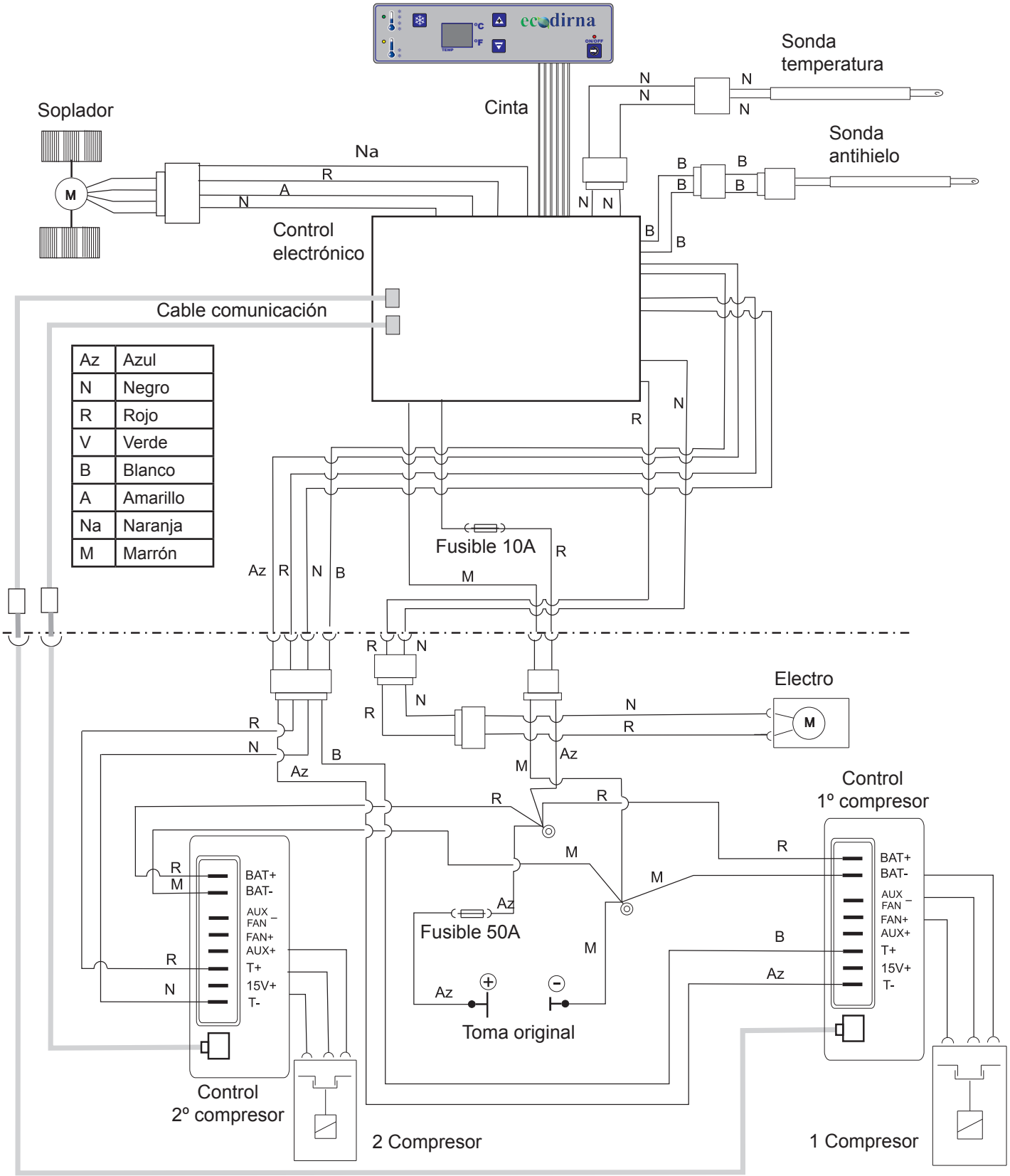
5 En parte inferior de la cabina fijar con abrazaderas a espárragos originales.

6	Abatir cabina y dejar en posición de marcha, perder cableado sobrante detrás del tubo de admisión.

Esquema eléctrico

¡AVISO IMPORTANTE!

Precaución de no invertir las polaridades al conectar la alimentación en el equipo. Si esto sucediera la placa no se encenderá, el equipo no funcionará y se producirán daños irreparables en los módulos de los compresores.



Assembly Recommendations

- Before starting assembly, please read instructions and follow them during installation process.
- Use the adequate tools for each operation.

Electricity

- Disconnect ignition key.
- Disconnect battery before starting assembly.
- Make sure electric components are securely connected, checking their correct fitting.

⚠ Warning

If the unit slants during assembly, wait for at least 60 minutes with the unit in horizontal position before starting it up.

⚠ Warning

When installing air conditioning equipment on roof, the upper cabin part must be protected with a cloth or a protective blanket to avoid possible scratches. When installing **Compact** on roof, take into account that, normally, cabins equipped with a hatch have a strong enough structure to hold equipment weight. However, if it is not the case and it is necessary to carry out a cut in the roof or, although it has a hatch, the material is not resistant enough (*if roof is made of fibre, plastic, etc...*), it is the installer who will have to decide, under his responsibility, if it is necessary to reinforce the roof to avoid possible deformations, breaks, water entries, etc., habilitating the means required to stop it from occurring.

Tools

Torx wrenches set
Allen wrenches set
Open-jawed spanner 10, 13, 14
Scissors
Flexo-meter

Documentation included

Mounting instructions	220.AA2.3001
User's guide	220.AA6.0057
Troubleshooting	220.AA6.0058
Warranty	220.AA1.0017

Symbology

Fragile

Beware of cuts!

Electrical hazard

⚠ Warnings

⚠ The installing personnel must have a sufficient training in vehicles air conditioning.

⚠ **dirna Bergstrom, s.l.** shall not be responsible for breakdowns or damages coming from an inadequate handling or installation of the equipment or from modifications and substitutions carried out without our express and written authorisation.

⚠ **Equipment pre-charged with refrigerating gas. (*Do not handle refrigerating gas circuit*).**

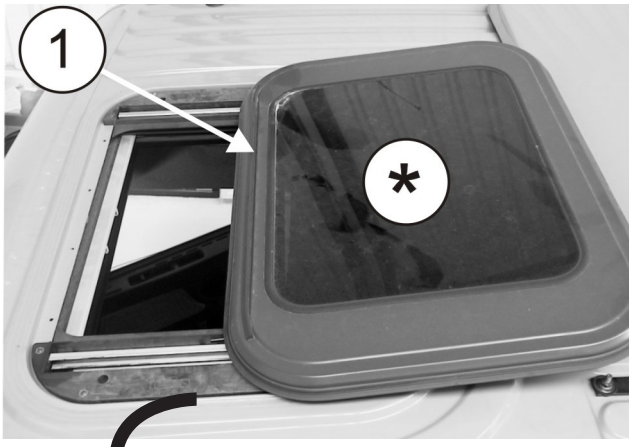
⚠ Please see product **warranty procedure** included in **Troubleshooting**.

⚠ Please see equipment **User's Guide** for its correct functioning of the remote control and control panel.

⚠ Once installation is finished, the following documents must be handed over to the user: **User's Guide**, **Warranty** and **Troubleshooting.**

⚠ Mount the front air input grille before starting assembly.

1 Dismount the hatch cover and the inner frame, and give to the customer.



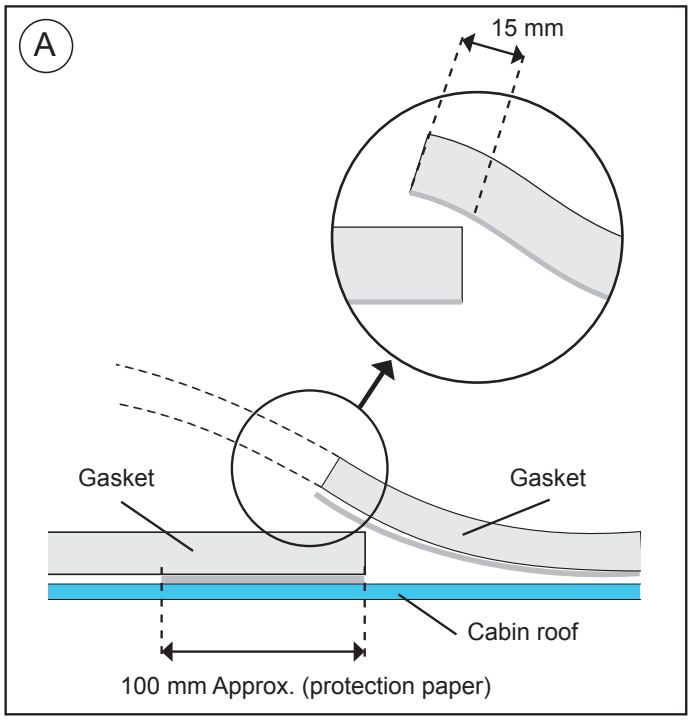
2 Stick on EPDM seal of 30x25mm, around the cut or the existing hatch gap

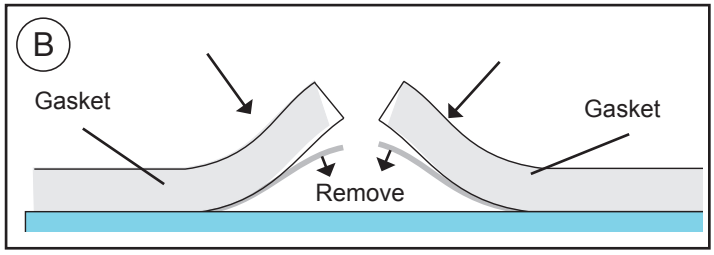
HOW TO CUT EPDM GASKET TO AVOID WATER FILTRATION INTO THE CABIN

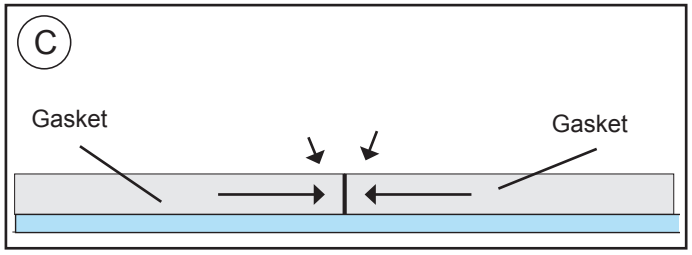
A- Glue gasket, keeping 100 mm of protection paper at each side.

B- Remove the two pieces of paper.

C- Glue by pressing both ends.



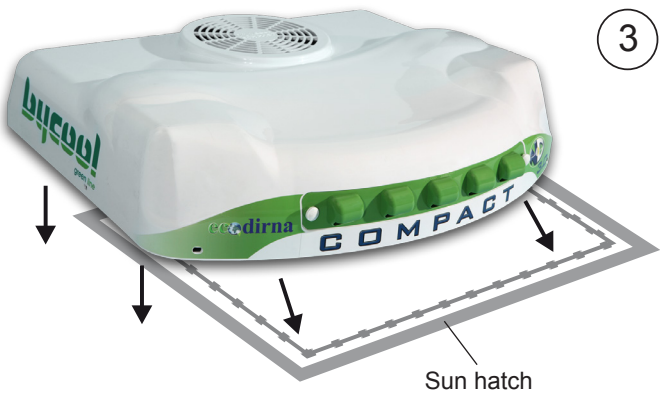




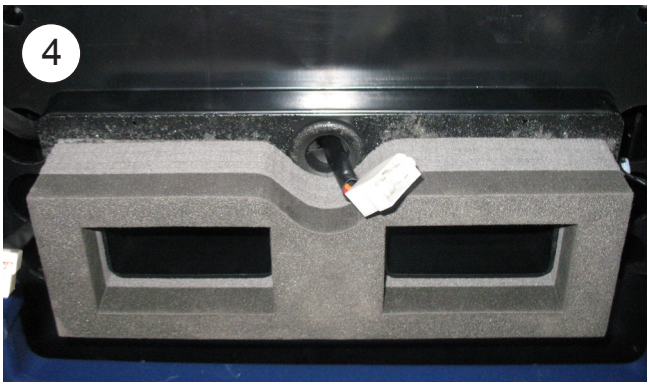
3 CABIN EXTERIOR:

Position the Compact in the gap.

Caution! When positioning the unit above the hatch gap, check that the wastewater run-offs are not blocked by the EPDM seal.

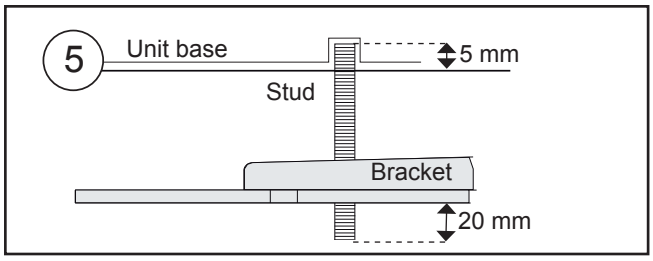


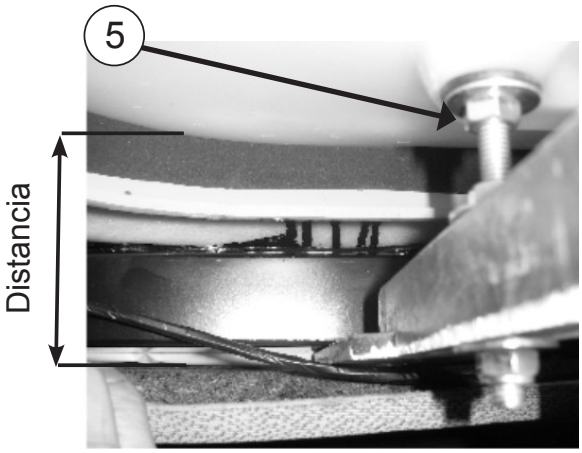
4 To place the foam rubber ducting remaining at the softer part of the base.



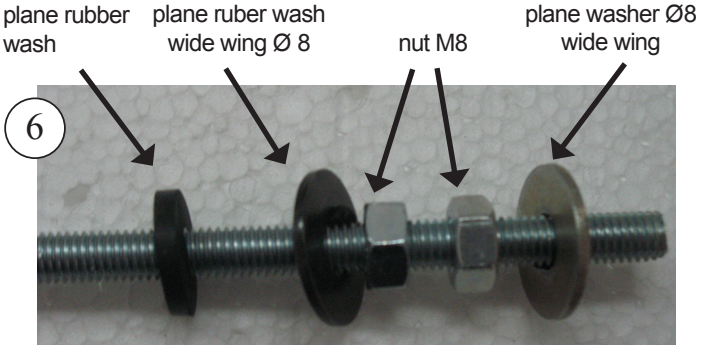
5 **INSIDE CABIN:**

Screw about 5 mm (4) 8/125x70,100 or 120 mm studs, the exact measure is chosen after the fastening supports have been presented and taking into account that studs must stick out of lower part about 20 mm.

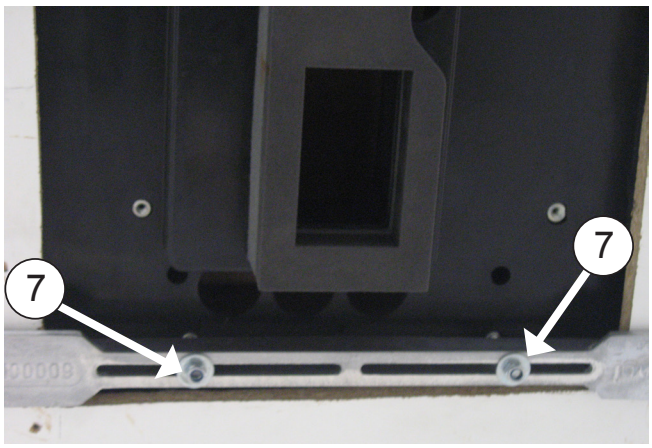




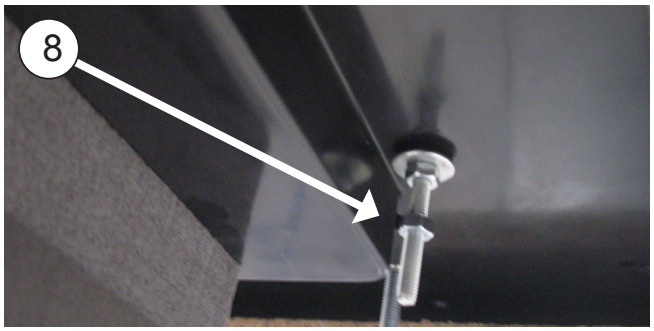
6 Following this order:
- plane rubber wash
- plane ruber wash wide wing diameter 8
- nut M8
- plane washer diameter 8 wide wing

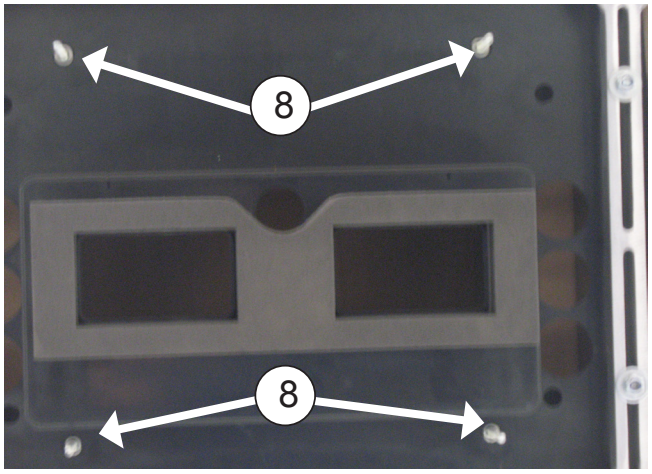


7 Place (2) fastening supports, with (1) washer and (1) M8 self-blocking nut, **without tightening**.

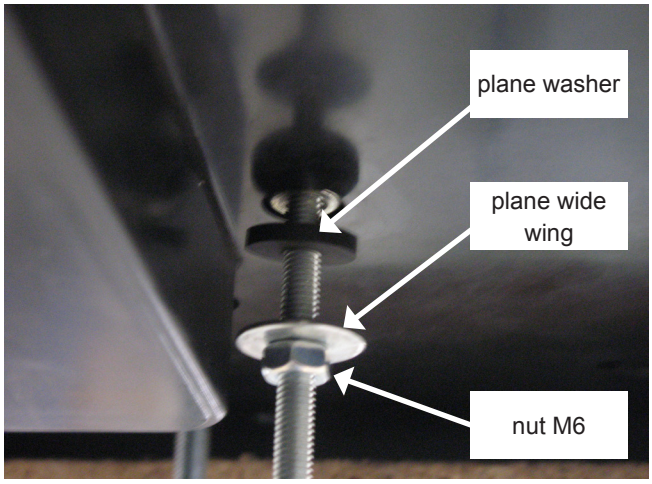


8 Screw 10 mm deep (4) M6 studs, where indicated distance (D) in figure point 10.

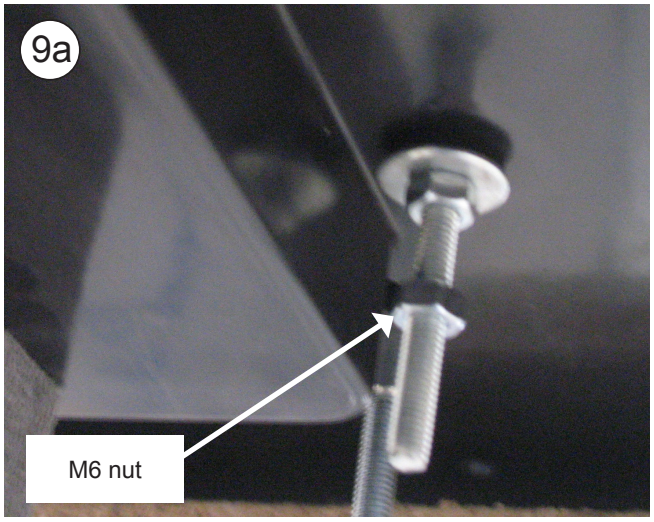




9 To place (1) rubber washer diameter 6 (1), plane washer diameter 6 wide wing and (1) nut M6, over each of the spigots of M6. After, to tight the nut til the rubber washer remain a little tight.

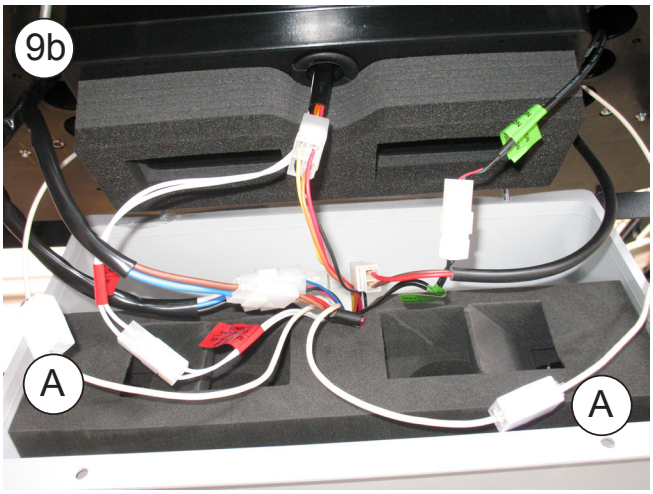


9a Place (2) fastening supports, with (1) washer and (1) M6 nut, **without tightening**.

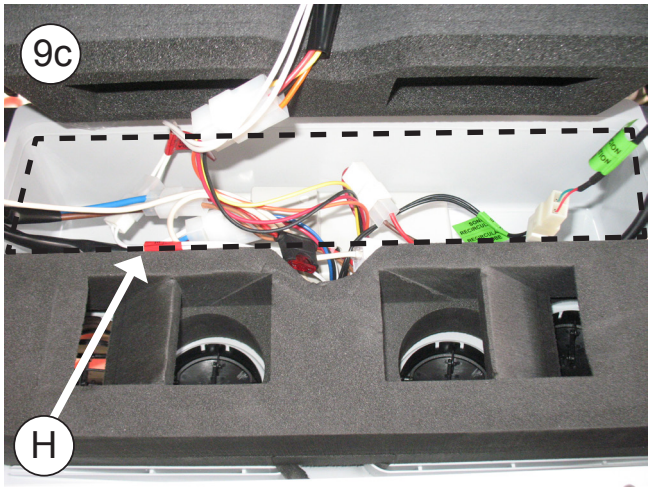


9b Connect (2) communication cables A, the (2) 4-way and (4) 2-way boxes, on the front, with those of the **Compact.**

Bear in mind that the two-way box marked with white cables is joined to the connector with white cables that comes out of the central part of the equipment.

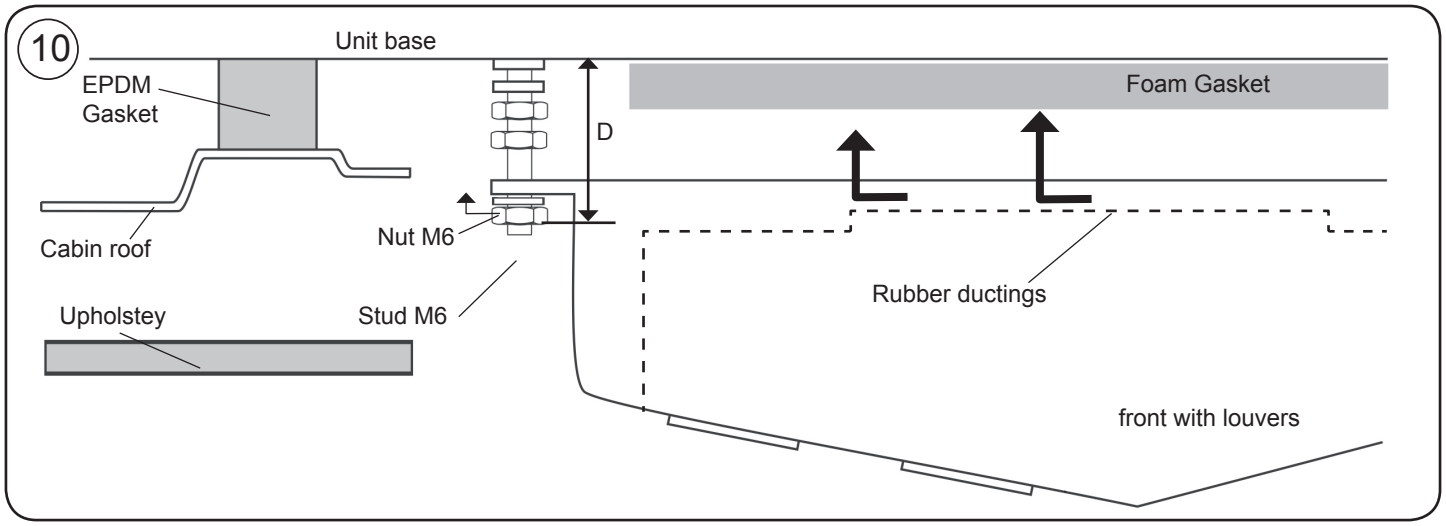


9c Insert the cables in the hole (H) present on the front to avoid interfering with the adjustment of the channelling element with the base of the equipment.

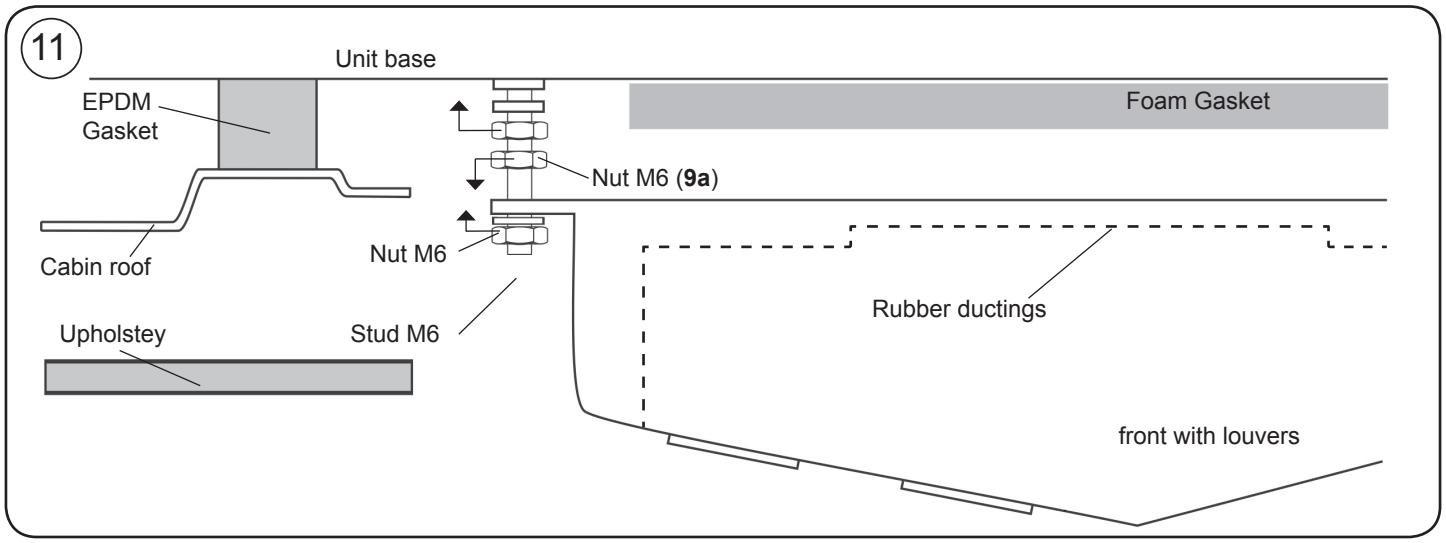


10 To place the front (at the previous mentioned) spigots with (1) washer M6 wide wing and (1) nut M6 in each spigot. To tight nuts til the rubber ducting til run into the upper rubber of the unit.

Important: The rubber ducting must being run into the upper rubber of the unit to avoid air leaks.



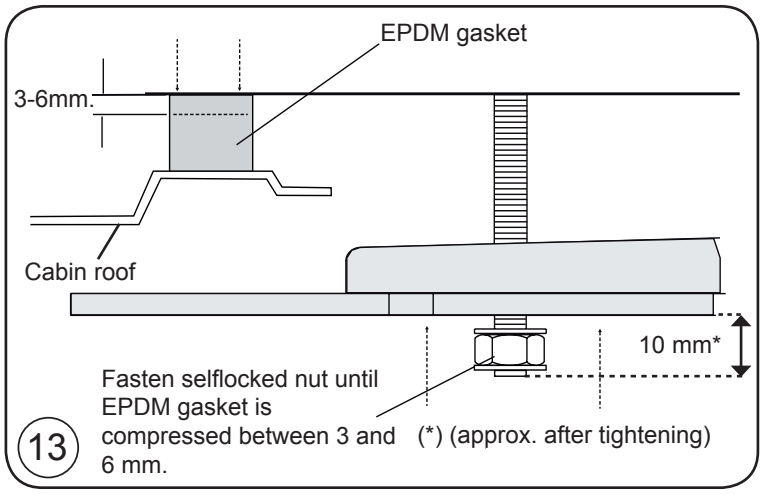
11 Tighten nut mentioned under point **9a** until it touches upper surface of front.

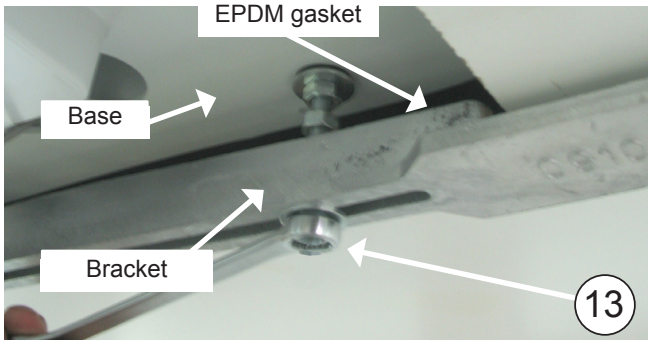


12 Place the console using original screws and align in the Compact in the most ideal position, until the original screws coincide in their location.

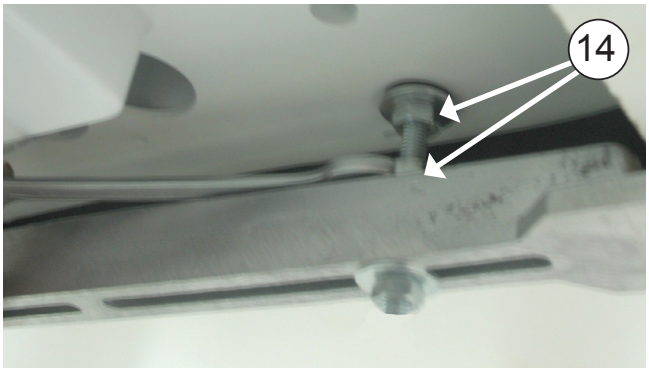
13 Fasten supports tightening nuts until outside EPDM joint of equipment is compressed, between 3 and 6 mm.

Important: To avoid water from filtering inside cabin, check EPDM joint tightening with Compact base, as indicated on **diagram**.



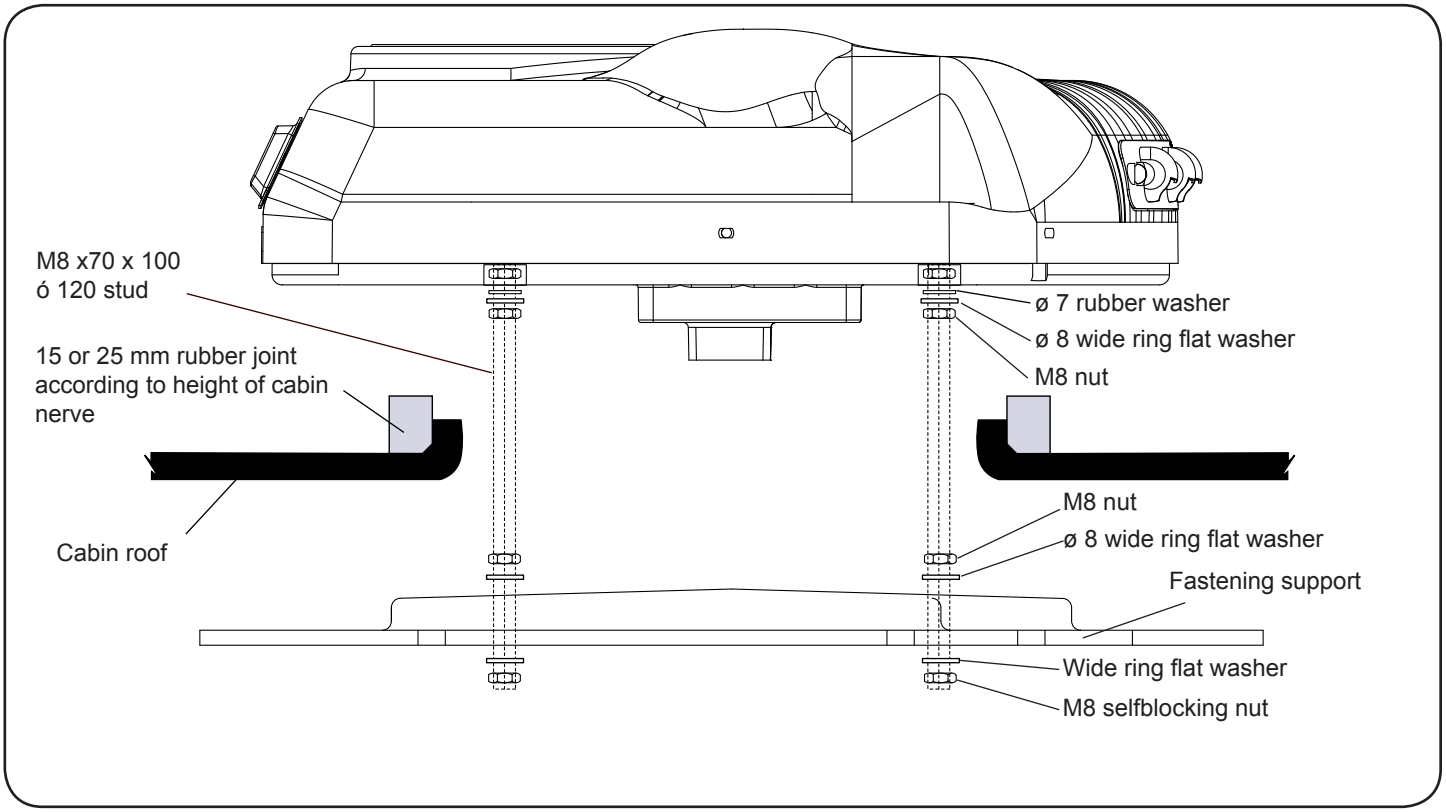


14 Tighten (4) M8 nuts to support and (4) to Unit base.

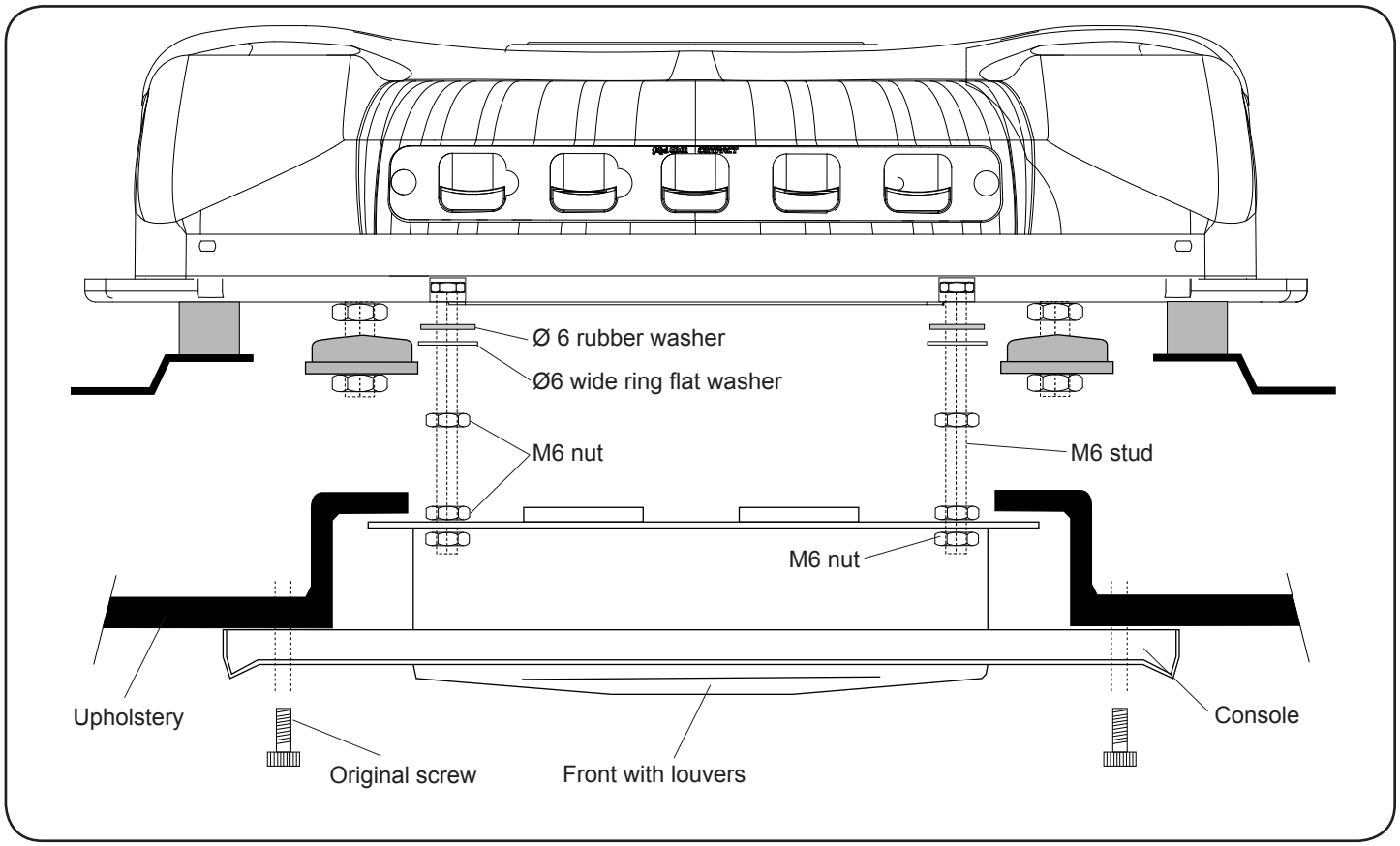


15	To place the frame with (4) original screw.

Exploded side view to supports fastening

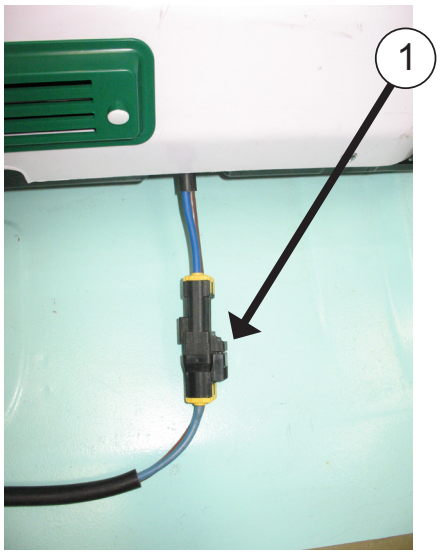


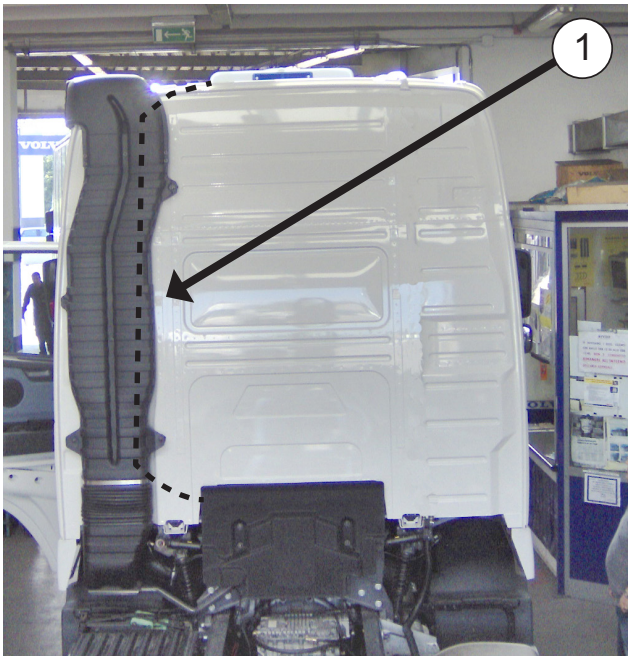
Exploded rear view to consoles fastening



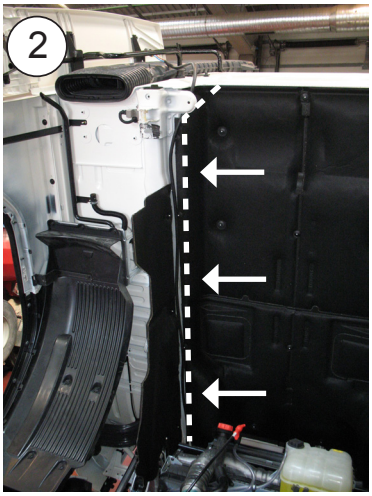
Detailed instructions on the installation of power supply cables

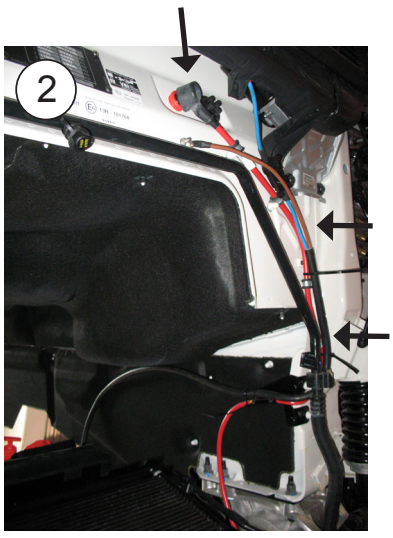
1 Connect the power cable to the unit's cable clamp and pass the cabling behind the input pipe.

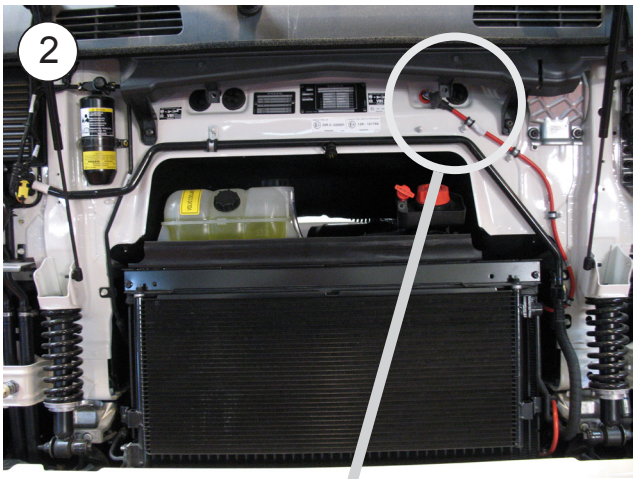


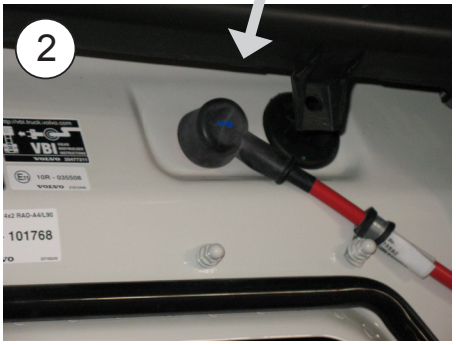


2 Take down the cabin and pass the cable through the indicated place to the positive connection point on the front of the cabin.

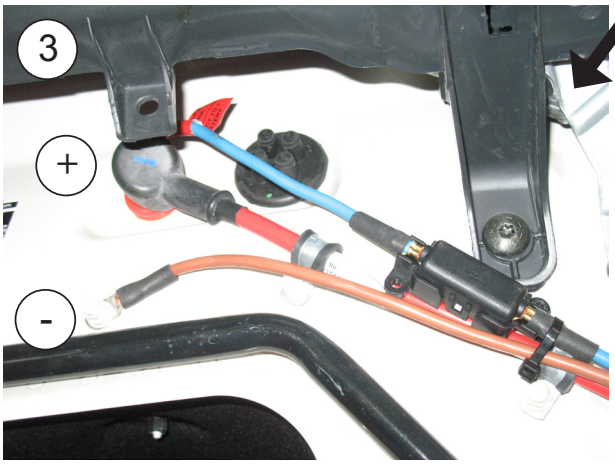


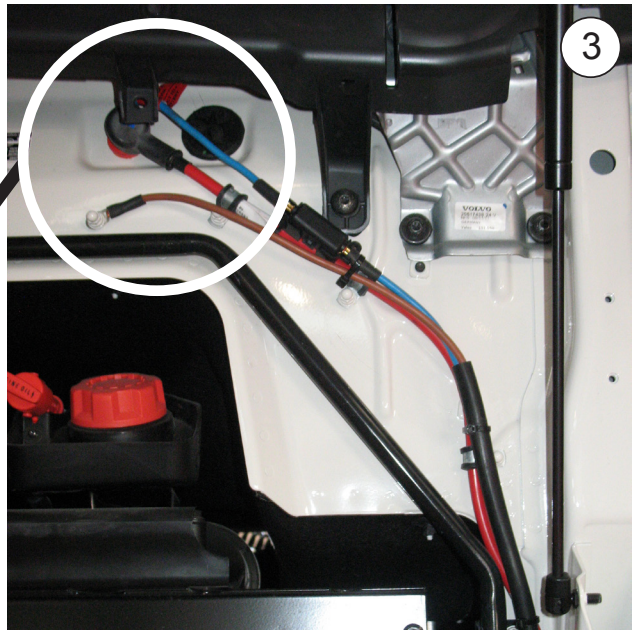




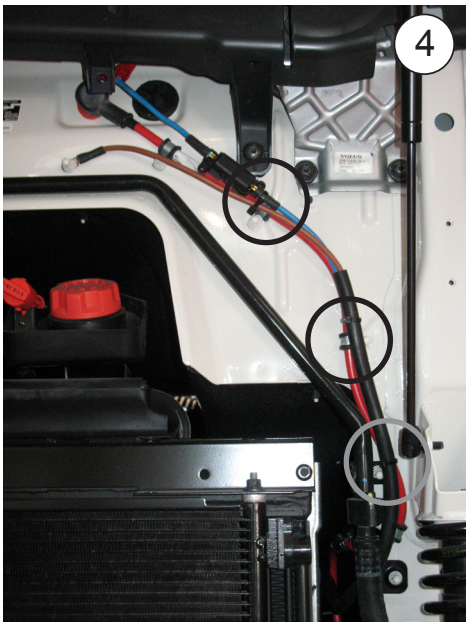


3 Remove the M6 nut and the M8 connection nut (+), and connect the power cable as indicated.





4 Secure the cabling to the original cable with flanges.



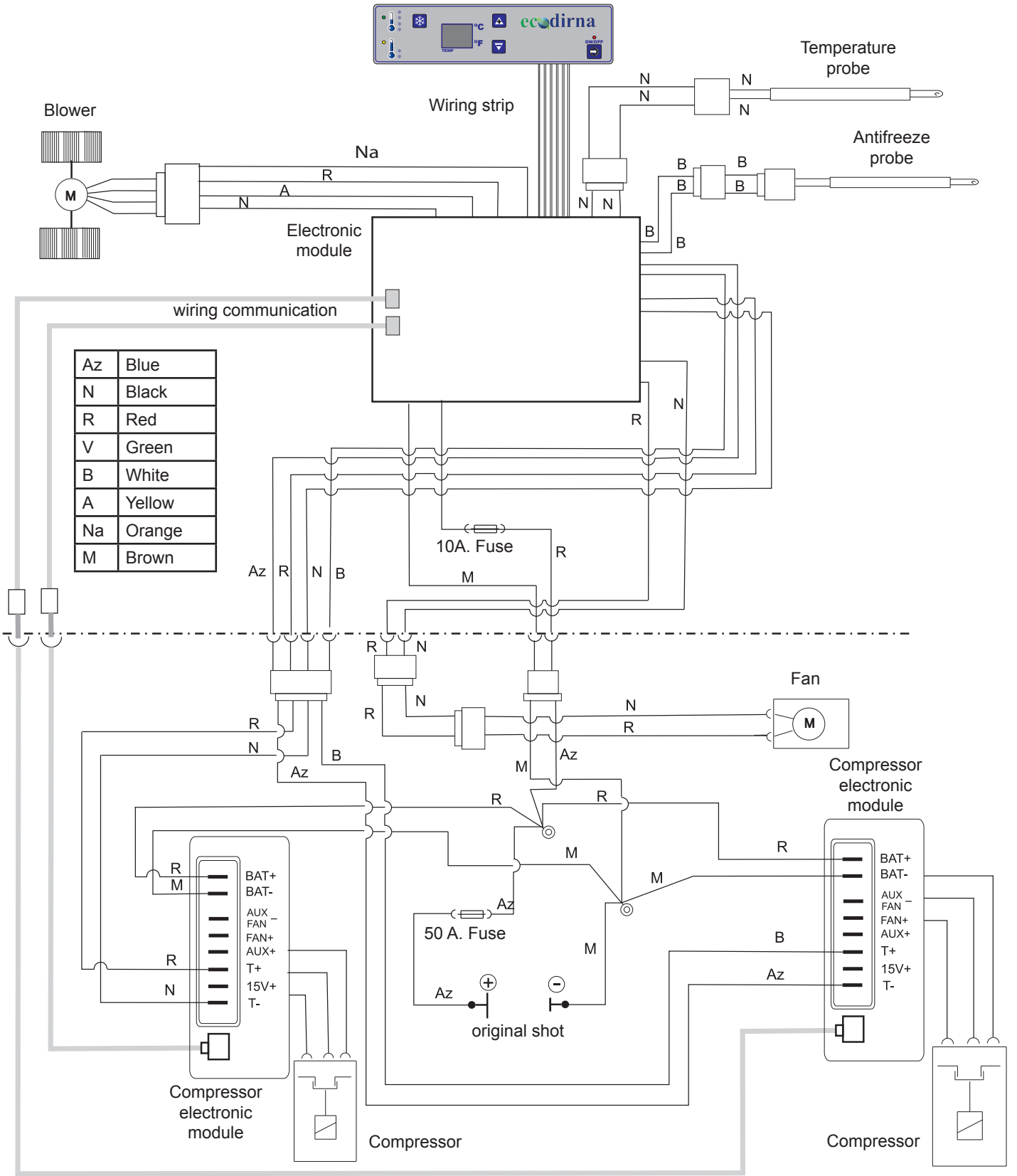
5 In the lower section, secure to the original studs with fasteners.

6	Take down the cabin and leave it in on position, placing any excess cabling behind the input pipe.

Electric wiring

IMPORTANT WARNING!

Take care not to invert polarities when connecting the unit to the power supply. If this were to happen, the unit will not work and irreparable damage will be caused to the compressor modules.



Recommendations Pour Le Montage

- Avant de commencer le montage de l'appareil, prière de lire les instructions et de les suivre attentivement.
- Utiliser les outils convenant à chaque opération.

Electricity

- Déconnecter la clé de contact.
- Déconnecter la batterie avant de commencer le montage.
- Vérifier le câblage des composants électriques et leur correcte installation.

⚠ Attention

Si pendant le montage l'équipement est incliné, il faudra attendre au moins 60 minutes avant de le mettre en marche une fois qu'il aura été remis sur sa position horizontale.

⚠ Attention

Lors de l'installation de l'appareil d'air conditionné sur le toit, il faudra protéger la partie supérieure de la cabine avec un linge ou une couverture de protection afin d'éviter les éventuelles égratignures.

Durant l'installation du **Compact**, tenir compte du fait que normalement les cabines pourvues d'écoutille possède une structure suffisamment solide pour supporter le poids de l´appareil. Cependant, si ce n'est pas le cas et qu'il est nécessaire de découper le toit ou même si disposant d'écoutille, la structure n'est pas suffisamment rigide (si elle était en fibre, plastique, etc.) il appartiendra à l'installateur de décider s'il faut renforcer le toit pour éviter toute déformation, rupture ou voie d'eau, etc., et prendre les mesures nécessaires à cet effet.

Outils

Jeu de clés Torx
Jeu de clés Allen
Clé fixe 10, 13, 14
Ciseaux
Mètre

Documentation included

Instructions de montage	220.AA2.3001
Guide de l'utilisateur	220.AA6.0057
Solution des problèmes	220.AA6.0058
Garantie	220.AA1.0017

Symbologie

Fragile

Attention aux coupures !

Risque électrique

⚠ Garantie

⚠ L'installateur devra posséder la formation pertinente en air conditionné sur véhicules.

⚠ **dirna Bergstrom, s.l.**, ne sera pas responsable des dommages ou des bris dérivés d'une installation ou d'une manipulation incorrecte ni des modifications réalisées sans autorisation expresse par écrit.

⚠ **Appareil pré-chargé de gaz réfrigérant. (*Ne pas manipuler le circuit de gaz réfrigérant*).**

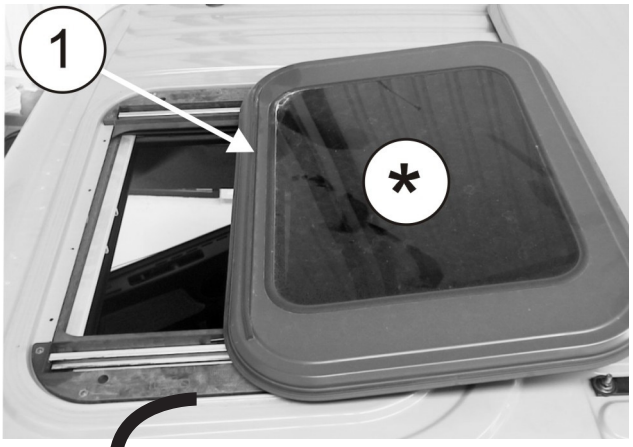
⚠ Voir **la procédure de garantie** du produit au **Diagnostic de problèmes**.

⚠ Voir le **Guide de l'Usager** de l'appareil pour le fonctionnement correcte de la télécommande et du tableau de commande.

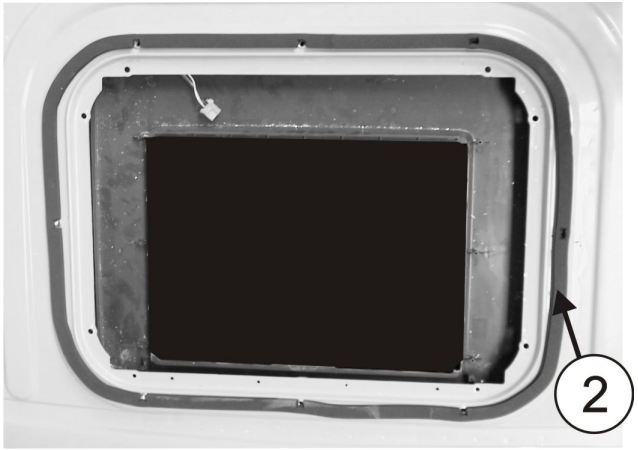
⚠ Après l'installation, vous devez fournir à l'utilisateur: Manuel d'utilisation, garantie et diagnostic de pannes.

⚠ Avant de commencer le montage, monter la grille d'entrée d'air frontale.

1 Démonter le couvercle écoutille, cadre intérieur et remettre au clien.



2 Coller le joint EPDM de 30x25mm, autour de la coupure ou du creux de l'écoutille.

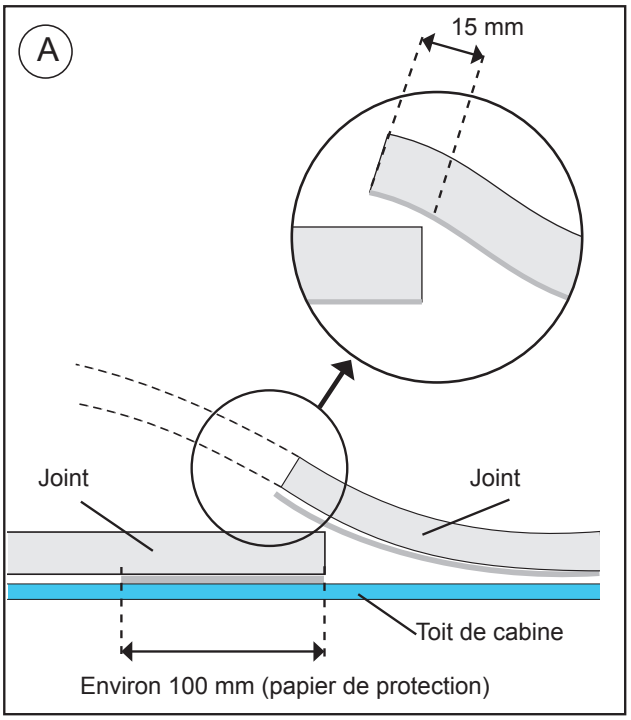


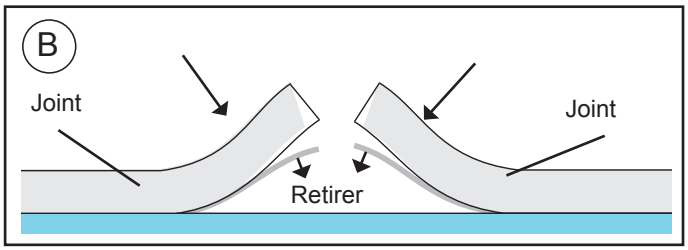
COMMENT COUPER LE JOINT EPDM POUR EVITER LES FILTRATIONS DANS LA CABINE

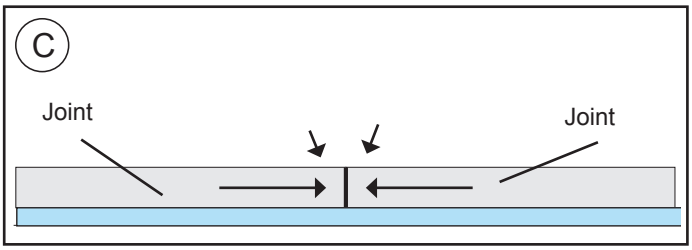
A- Coller le joint en maintenant une protection en papier de 100 mm de chaque côté.

B- Retirer les deux morceaux de papier.

C- Coller en faisant pression sur les deux extrémités.





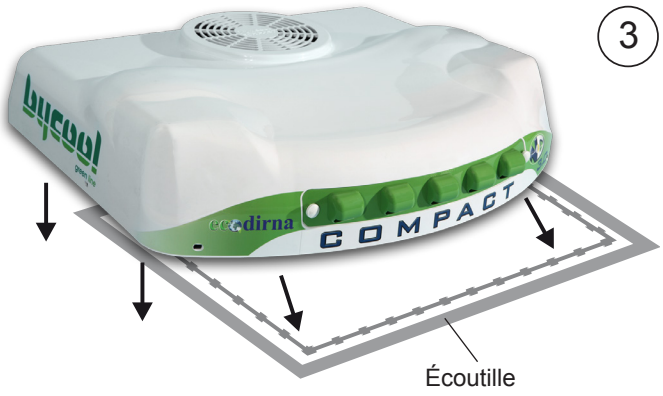


3

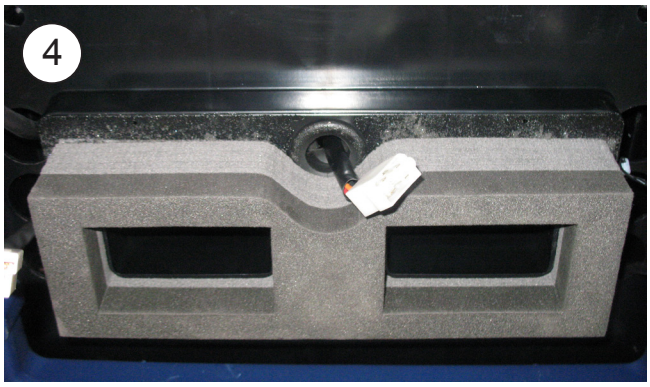
EXTÉRIEUR CABINE:

Placer le Compact dans le creux.

Attention ! Avant de placer l'équipement sur le creux de l'écoutille, vérifier que les sorties d'écoulement ne soient pas bouchées par le joint EPDM.

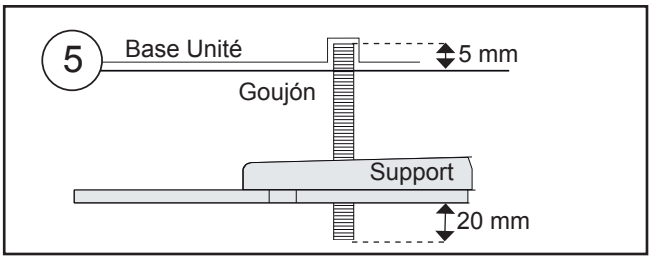


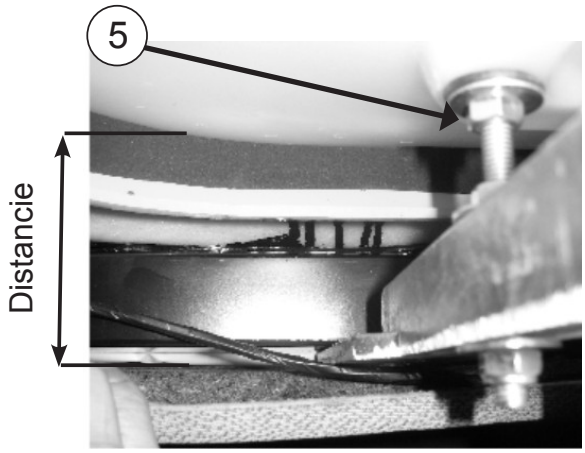
4 Placer les canalisations a mouse en restanta la part plus molle sous la base d´équipement.



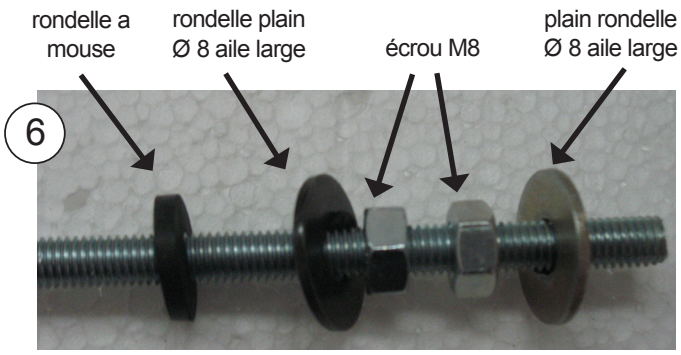
5 **INTERIEUR CABINE:**

Visser 5 mm environ (4) goujons de 8/125x70, 100 ou 120 mm, en fonction de la distance plus ou moins grande de l'appareil jusqu'à ce qu'en positionnant les supports de fixation, il ne reste que 20 mm au-dessous de ces supports.

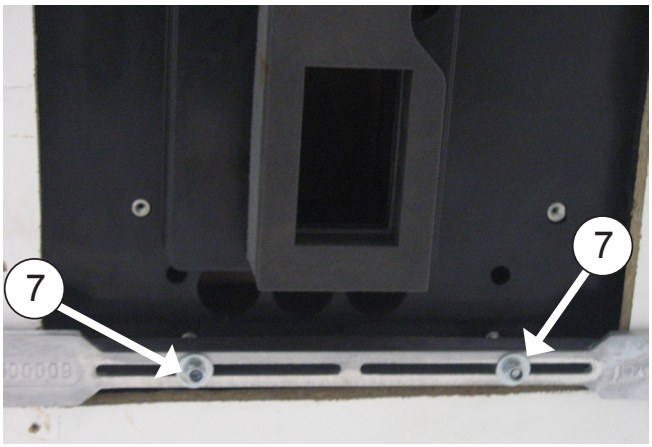




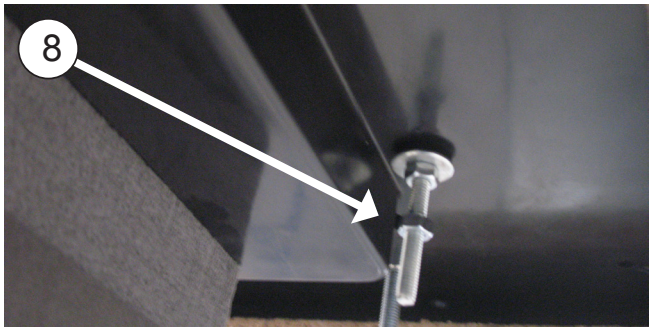
6 en suivant cet ordre :
- rondelle a mouse
- rondelle plain diamètre 8 aile large
- écrou M8
- plain rondelle diamètre 8 aile large

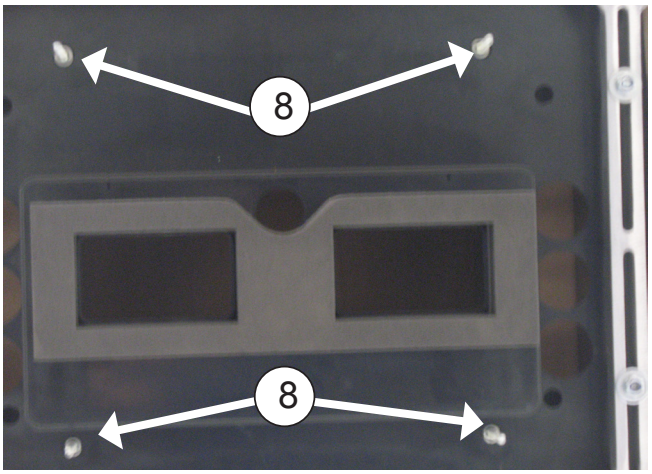


7 Placer les supports de fixation (2), avec une rondelle (1) et un écrou autobloquant (1) M8, **sans serrer**.

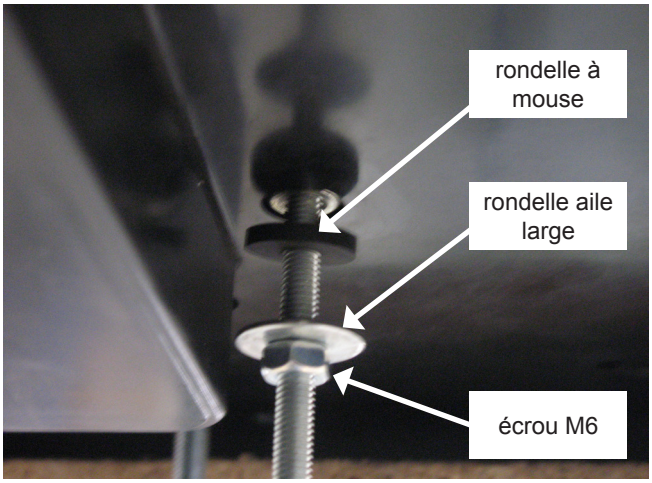


8 Visser 10 mm les goujons (4) M6 x 80, comme indiqué au (D) du schema point 10.

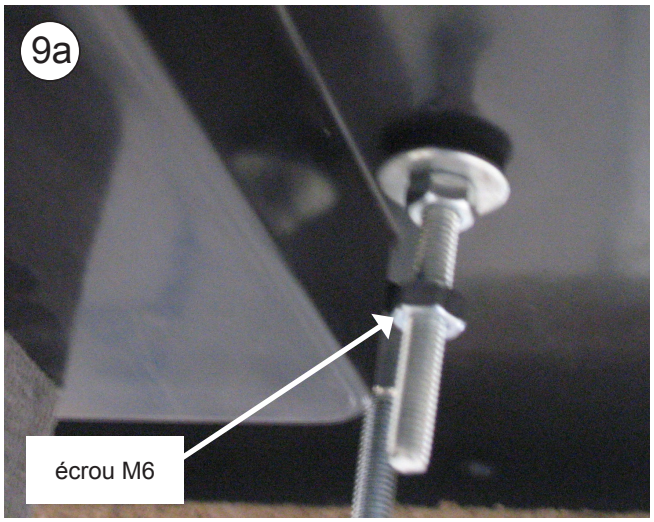




9 Placer (1) rondelle mouse dimètre 6 (1) plain rondelle dimètre 6 aile large et (1) écrou M6 sur chaqu´un des asperges M6. En suivant serrer l´écrou jusqu´au la rondelle à mouse reste un peu pressée.

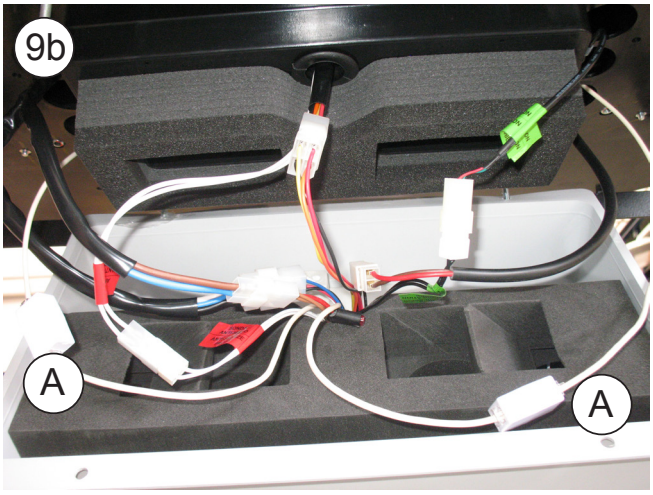


9a Placer l'écrou (1) M6 sans le serrer sur chaque goujon.

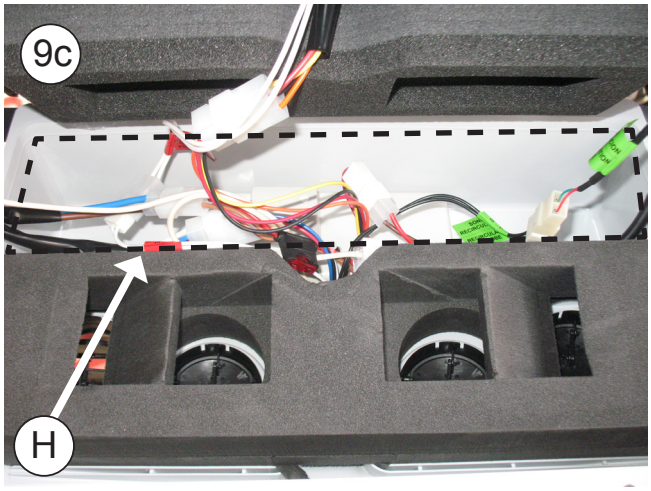


9b Connecter (2) les câbles communication A, les (2) boîtiers à 4 voies et (4) à 2 voies, de la partie avant avec celles du **Compact**.

Compte tenu du fait que le boîtier à deux voies marqué avec deux câbles blancs rejoint le connecteur à câbles blancs qui vient de la partie centrale de l'équipement.

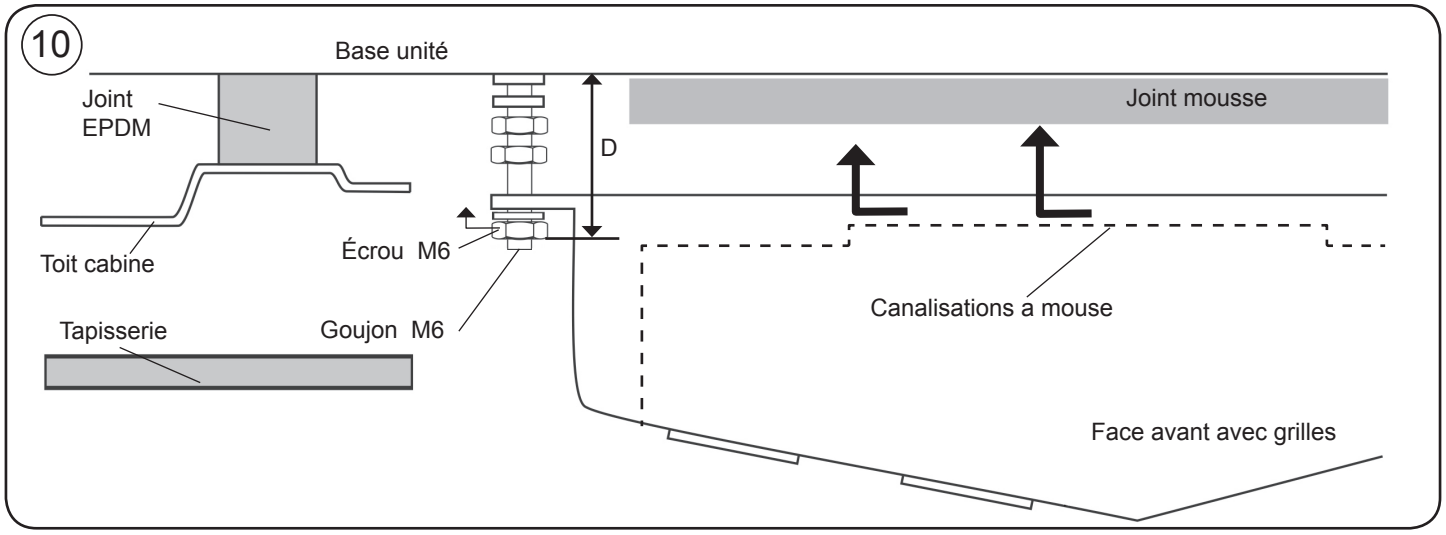


9c Introduire les câblages dans l'espace existant (**H**) sur la partie avant pour ne pas interférer dans le réglage des canalisateurs avec la base de l'équipement.

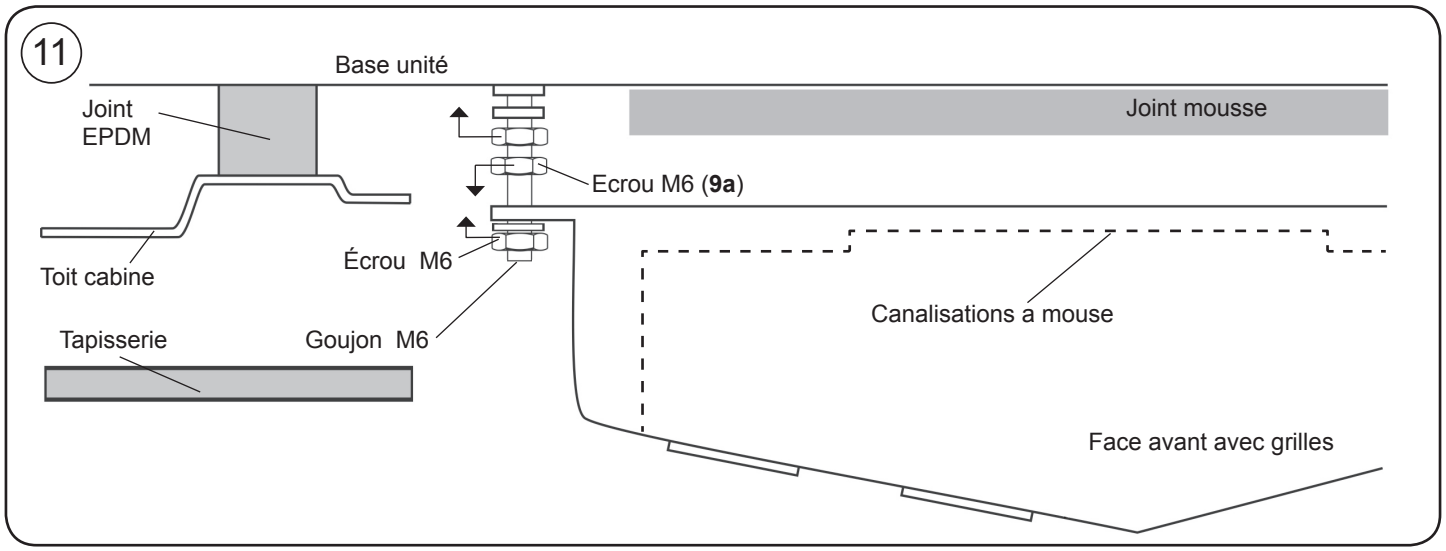


10 Placer les asperges dans le front (comme indiqué premierement) avec (1) rondelle M6 aile large et (1) écrou M6 dand chaque asperge. Serrer les écrous jusqu´au les canalisations a mouse font butoir dans la mouse superieur d´équipement.

Important: La canalisation a mouse doît faire butoir contrela mouse superieur d´équipement pour éviter fuites d´air.



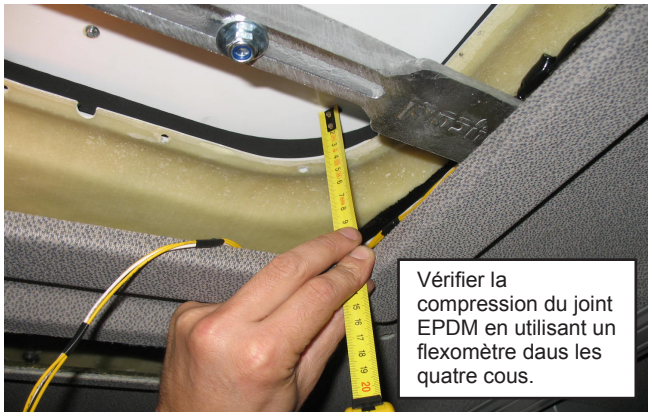
11 Serrer l'écrou indiqué au point **9a** jusqu'à ce qu'il touche la surface supérieure de la partie avant.

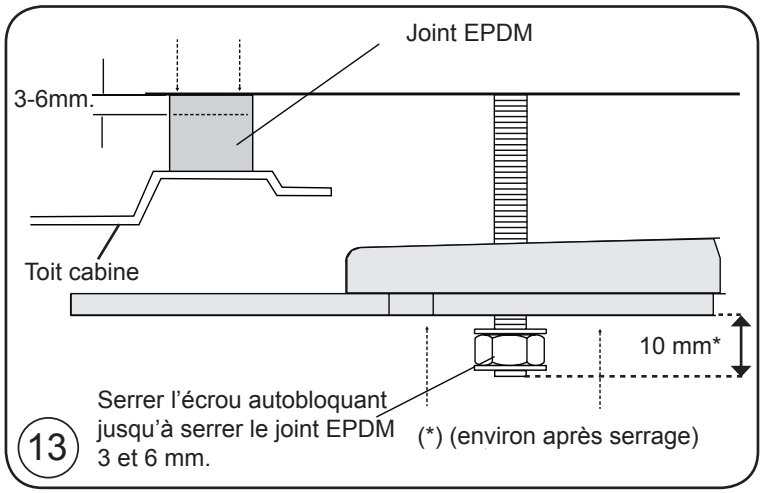


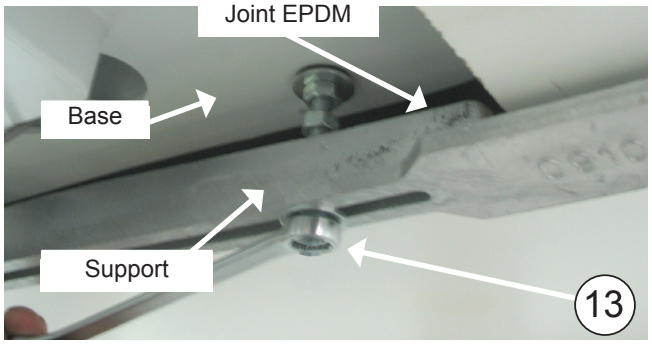
12 Présenter la console avec vis originales et centrer le **Compact** dans la meilleure position.

13 Fixer les supports en serrant les écrous jusqu'à serrer le joint EPDM de l'appareil entre 3 et 6 mm.

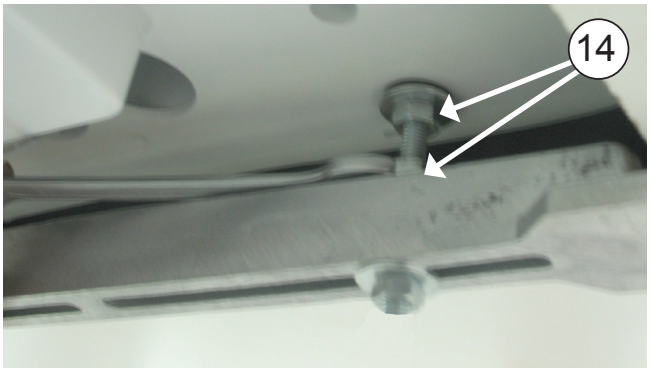
Important: Pour éviter la filtration d'eau dans la cabine, vérifier le serrage du joint EPDMA à la base du Compact, comme indiqué sur le **diagramme.**





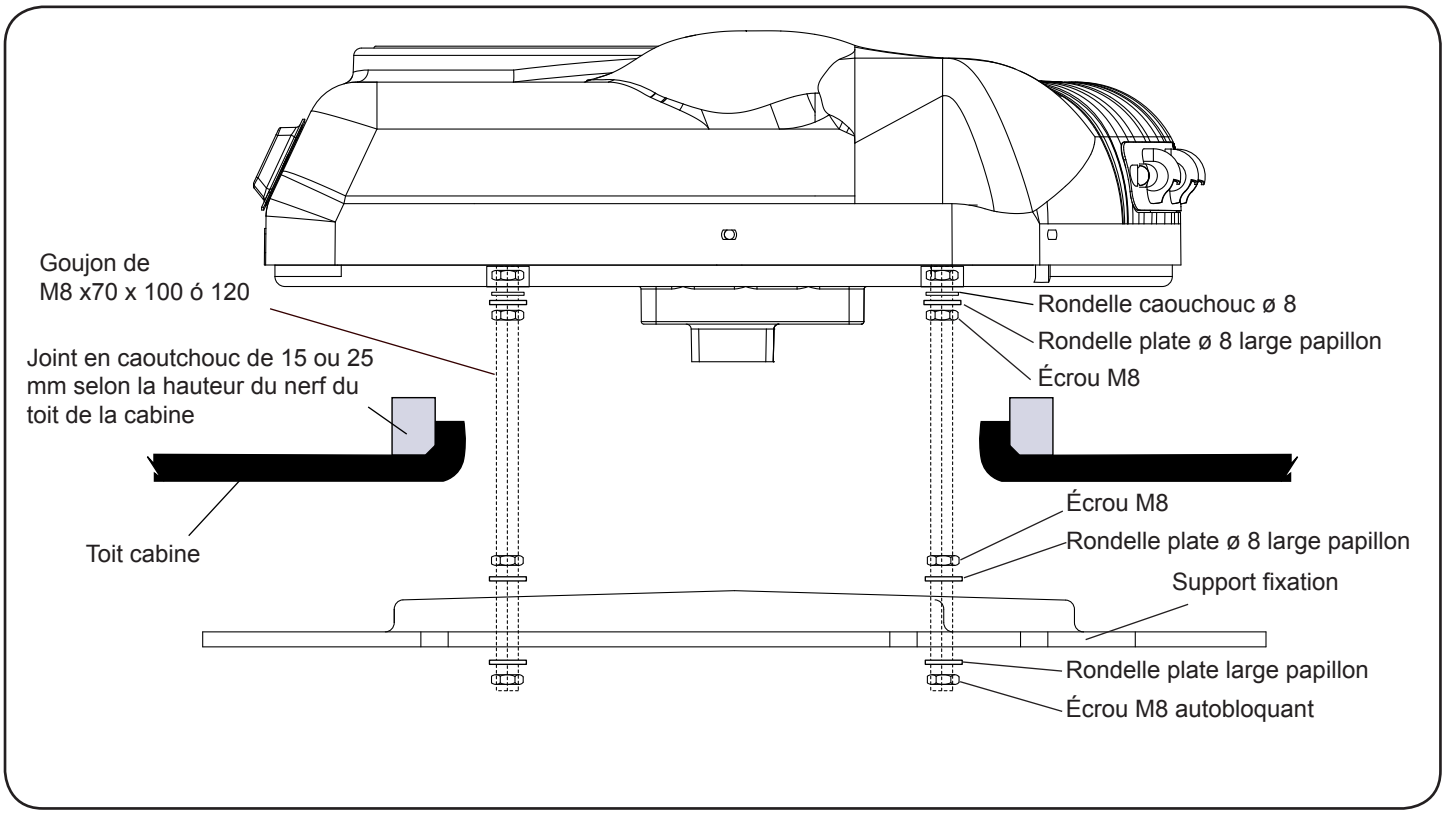


14 Serrer les écrous (4) M8 afin de fixer à (4) l'unité base.

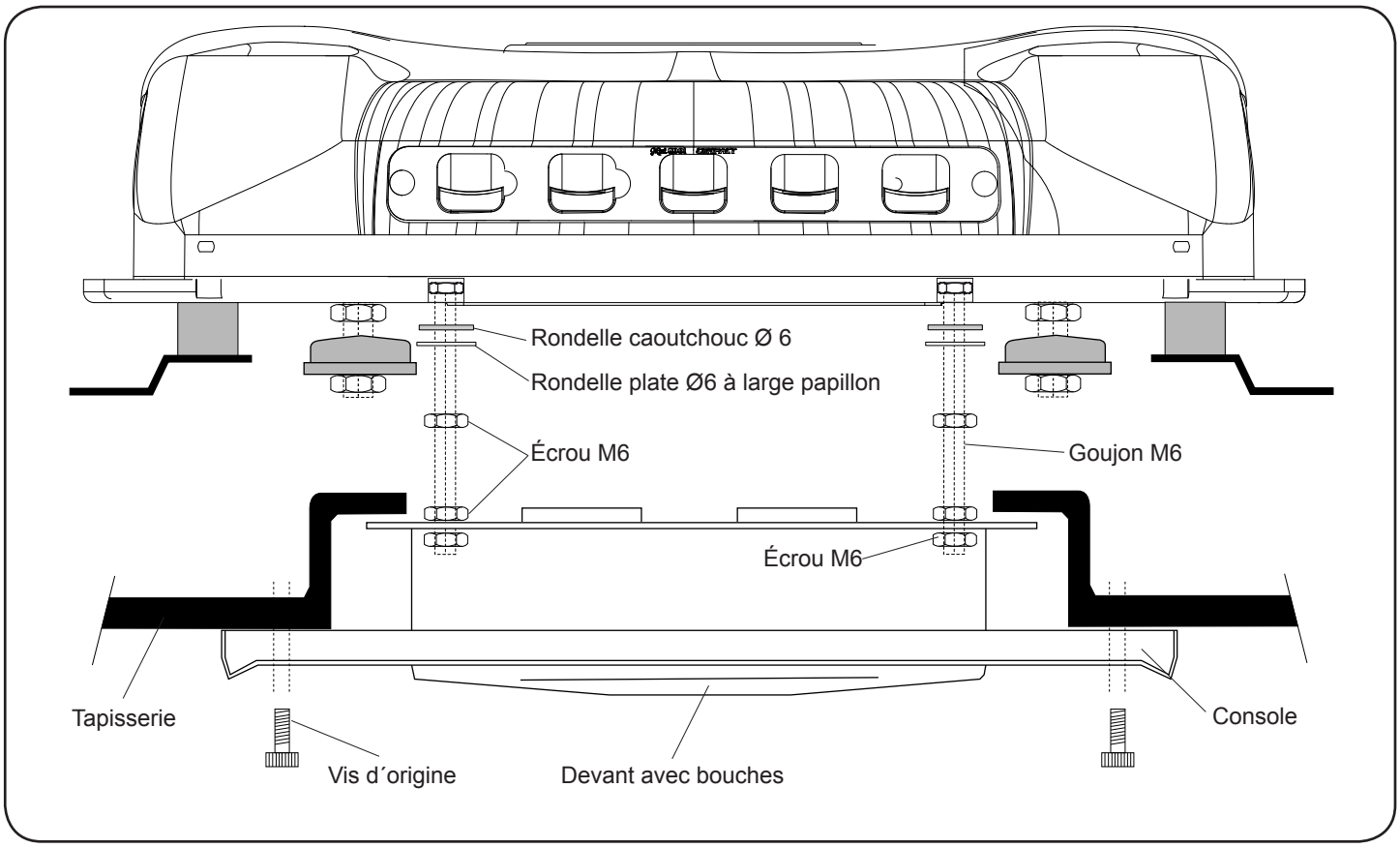


15	Placer la console avec (4) vis originales.

Vue explosée jusqu'à la fixation des supports de fixation

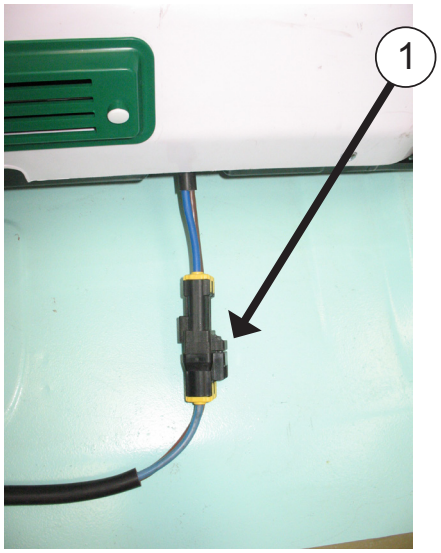

Goujon de
M8 x70 x 100 ó 120
Joint en caoutchouc de 15 ou 25 mm selon la hauteur du nerf du toit de la cabine
Toit cabine
Rondelle caouchouc ø 8
Rondelle plate ø 8 large papillon
Écrou M8
Écrou M8
Rondelle plate ø 8 large papillon
Support fixation
Rondelle plate large papillon
Écrou M8 autobloquant

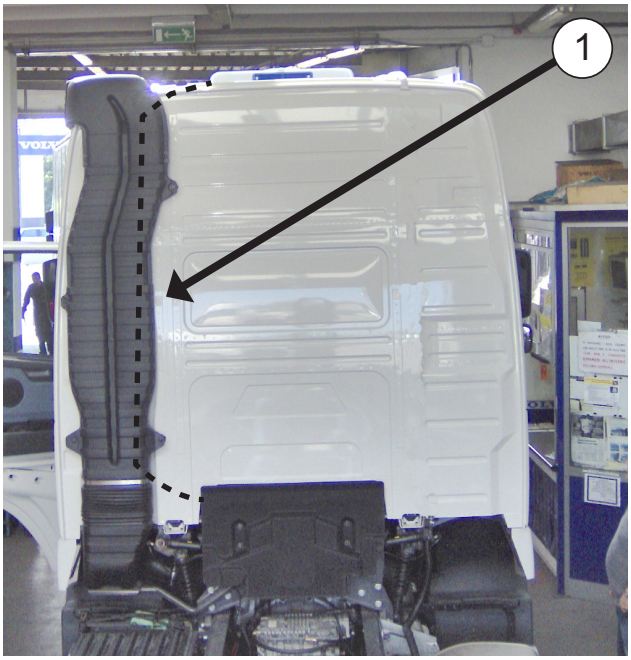
Vue explosée jusqu'à fixation des consoles



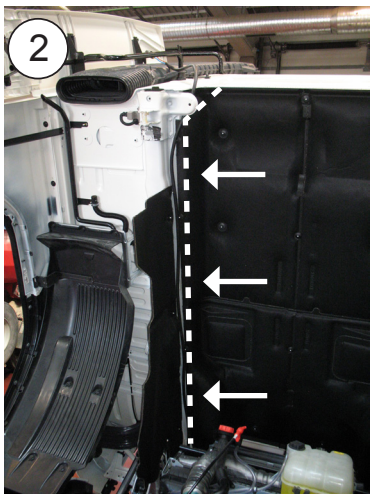
Instructions détaillées sur l'installation du câblage d'alimentation

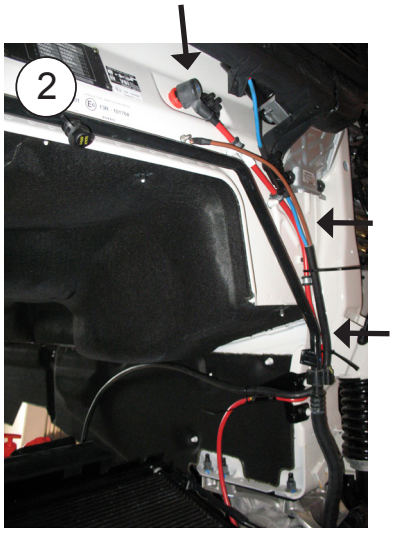
1 Connecter la borne du câble d'alimentation à la borne de l'équipement et passer le câblage derrière le tuyau d'admission.

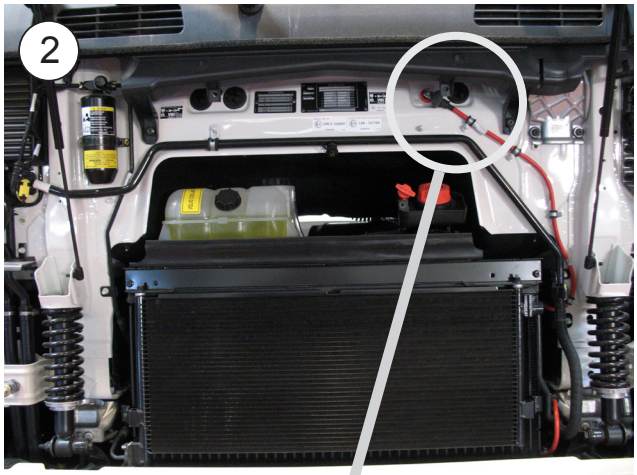


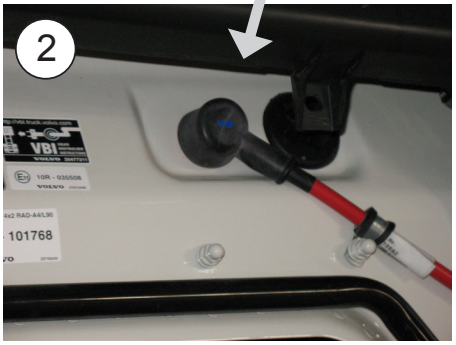


2 Incliner la cabine et mener le câble à travers le lieu indiqué jusqu'à la prise de positif située sur la partie avant de la cabine.

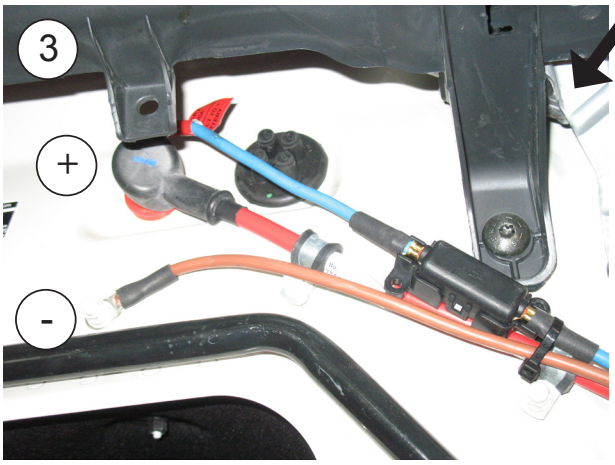


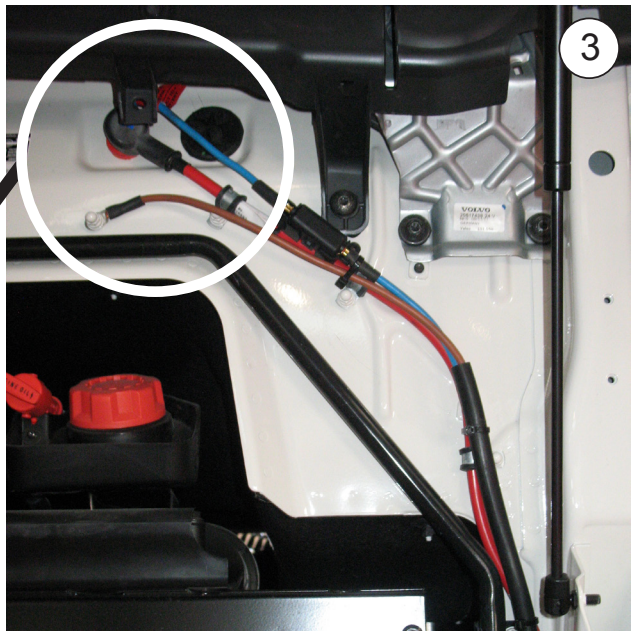




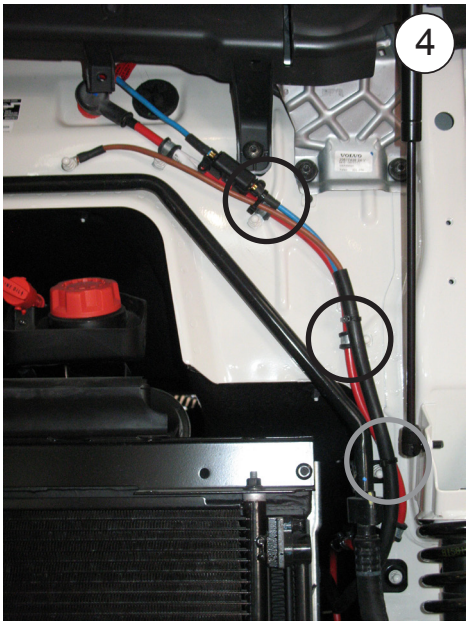


3 Démonter l'écrou M6 et l'écrou M8 de la prise (+) et connecter le câblage d'alimentation comme cela est indiqué.





4 Fixer le câblage avec des brides au câble d'origine.



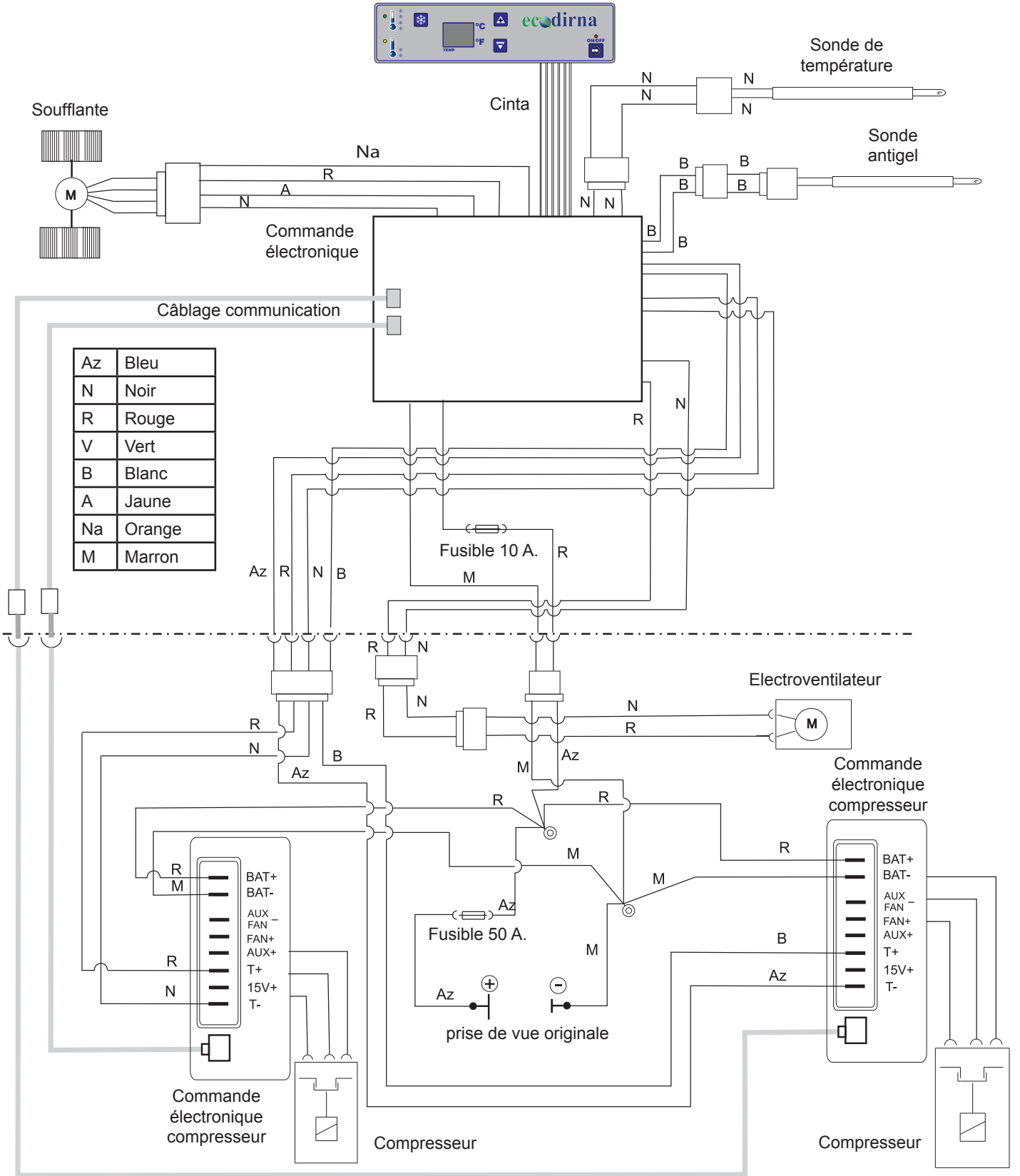
5 Sur la partie inférieure, fixer avec des colliers aux vis sans tête d'origine.

6	Incliner la cabine et laisser sur la position de marche. Placer le câblage restant derrière le tuyau d'admission.

Câblage electrique

AVERTISSEMENT IMPORTANT!

Attention ! Ne pas inverser les polarités dans la connexion de l'alimentation à l'équipement. Si cela se produisait, la plaque ne s'allumerait pas, l'équipement ne fonctionnerait pas et des dommages irréparables se produiraient sur les modules des compresseurs.



Empfehlungen Zur montage

- Vor und während der Montage bitte diese Anweisungen lesen und beachten.
- Benutzen Sie für jeden Arbeitsschritt die geeigneten Werkzeuge.

Elektrizität

- Zündschlüssel abziehen.
- Vor Montagebeginn die Batterie abklemmen.
- Den ordnungsgemäßen Anschluss und die korrekte Installation der Elektrokomponenten überprüfen.

⚠ Achtung

Sollte sich das Gerät während der Montage neigen, muss man mindestens 60 Minuten warten, nachdem es wieder in die horizontale Lage gebracht wurde, um es wieder einzuschalten.

⚠ Achtung

Wird die Klimaanlage im Kabinendach installiert, muss der obere Teil der Kabine mit einem Tuch oder einer Decke gegen eventuelle Kratzer geschützt werden. Bei der Installation der **Compact** auf dem Kabinendach muss darauf geachtet werden, dass mit Luken ausgestattete Kabinen über eine ausreichend stabile Struktur verfügen, um das Gewicht des Geräts Stand zu halten. Sollte das Fahrzeug über keine Luke verfügen und sollte es notwendig sein, das Kabinendach aufzuschneiden, bzw. sollte die vorhandene Struktur nicht ausreichend stabil sein (z.B. wenn sie aus Faser, Kunststoff usw. hergestellt ist), obliegt es dem Installateur zu entscheiden, ob das Kabinendach zur Vermeidung von Verformungen, Brüchen, undichten Stellen usw. verstärkt werden muss, und die hierfür notwendigen Mittel bereit zu stellen.

Werkzeuge

Torx-Schraubenschlüssel
Inbusschraubenschlüssel
10er, 13er, 14er Schraubenschlüssel
Schere
Metermaß

Mitgelieferte unterlagen

Montageanweisungen	220.AA2.3001
Benutzerleitfaden	220.AA6.0057
Fehlerdiagnose	220.AA6.0058
Garantie	220.AA1.0017

Symbologie

Fragile

Attention aux coupures !

Risque électrique

⚠ Warnhinweise

⚠ Der Installateur muss im Bereich Fahrzeug-Klimaanlagen ausreichend geschult sein.

⚠ **dirna Bergstrom, s.l.** übernimmt keine Verantwortung für Schäden oder Brüche aufgrund einer nicht ordnungsgemäßen Installation oder Bedienung des Geräts oder den Austausch von Teilen bzw. Umbauten, die ohne die erforderliche schriftliche Genehmigung durchgeführt wurden.

⚠ **Mit Kältemittel vorgefülltes Gerät. (*Kältemittelkreislauf nicht manipulieren*).**

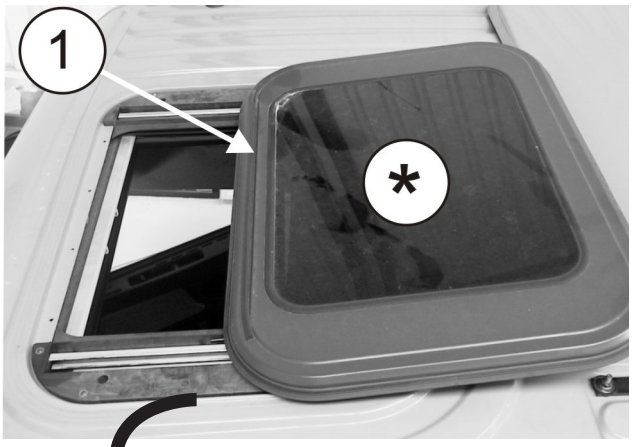
⚠ Siehe **Garantieverfahren** des Produkts in der **Fehlerdiagnose**.

⚠ Siehe **Benutzerleitfaden** des Geräts für den ordnungsgemäßen Betrieb der Fernbedienung und des Bedienfelds.

⚠ Die folgenden Unterlagen müssen dem Benutzer nach der Installation ausgehändigt werden: **Benutzerleitfaden**, **Garantie** und **Fehlerdiagnose.**

Vor Montabeginn vorderes Lufteintrittsgitter montieren.

1 Lukendeckel, Innenrahmen ausbauen und dem Kunden übergeben



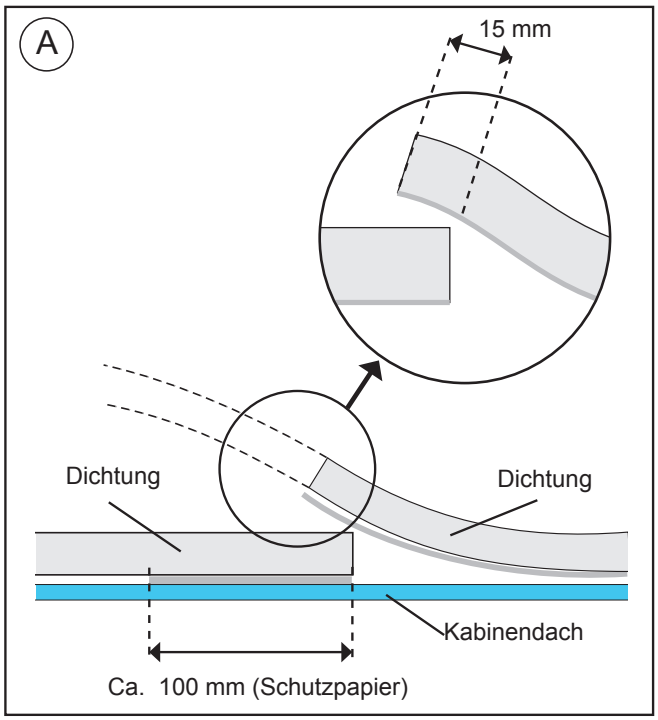
2 Dichtung EPDM 30x25mm um die eingeschnittene Öffnung oder die Lukenöffnung kleben.

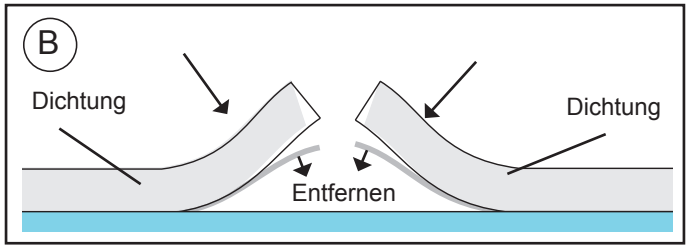
WIE DIE EPDM-DICHTUNG GESCHNITTEN WIRD, UM FILTRATIONEN IN DER KABINE ZU VERMEIDEN

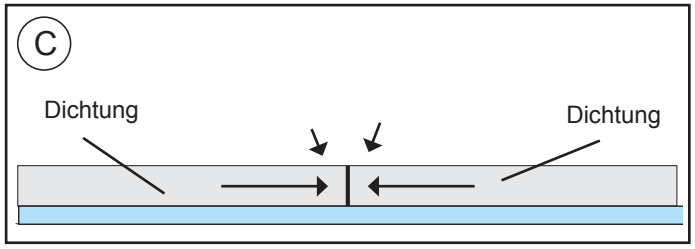
A- Dichtung aufkleben und dabei einen Papierschutz von 100 mm auf jeder Seite beibehalten.

B- Die zwei Papierstücke entfernen.

C- Unter Anpressen beider Enden aufkleben.





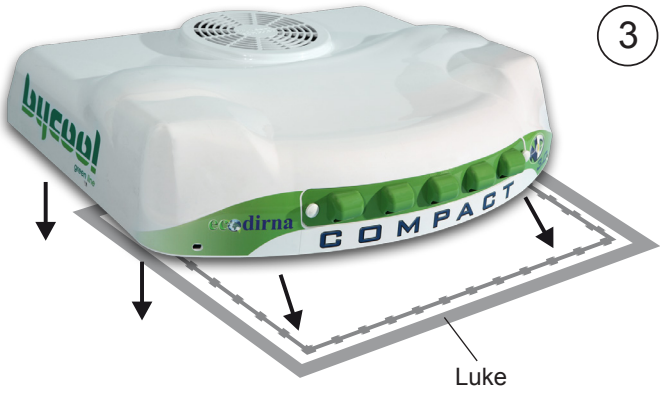


3

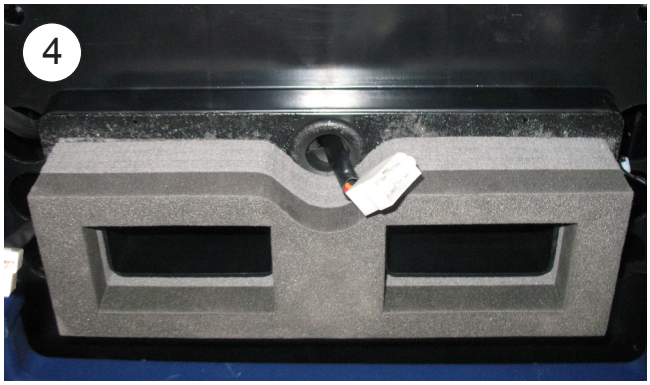
FAHRERHAUS AUSSEN:

Compact in der Öffnung positionieren.

Achtung! Beim Auflegen des Geräts auf die Lukenaussparung darauf achten, dass die Ablassausgänge nicht von der EPDM-Dichtung zusammengedrückt werden.

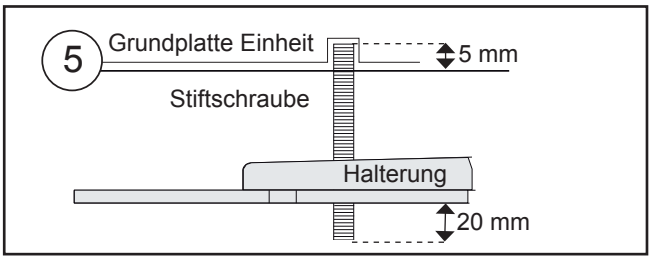


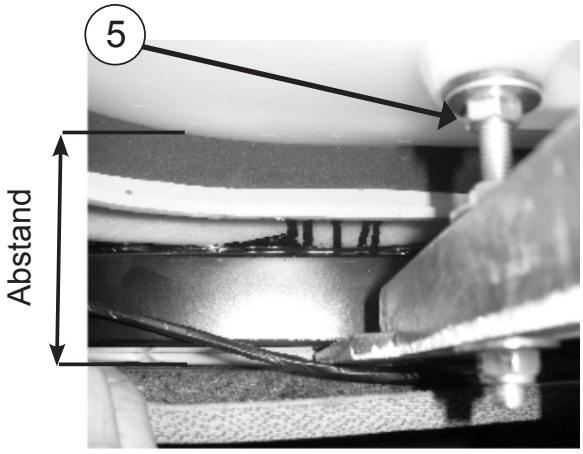
4 Montieren Sie den Schaumgummi Luftkanal mit dem weichen Teil zur Grundplatte / Basis.



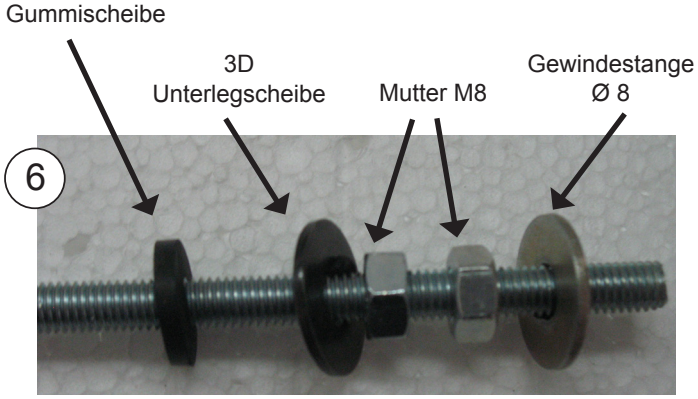
5 **KABINENINNENSEITE:**

Ca. 5 mm Gewinde für (4) Stiftschrauben 8/125x70, 100 oder 120 mm schneiden (abhängig vom größeren oder kleineren Abstand vom Gerät bis sie nach Positionierung der Befestigungsauflagen 20 mm unter diesen liegen).

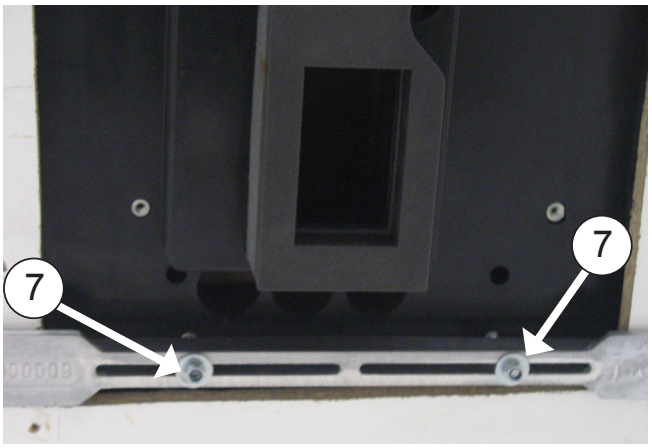




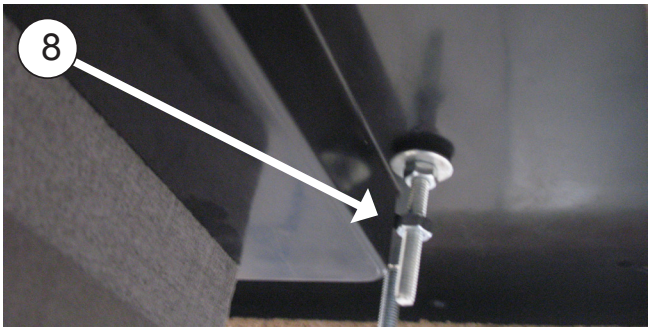
6 Montieren Sie wie folgt:
Gummischeibe / 3D Unterlegscheibe / Mutter / Gewindestange.

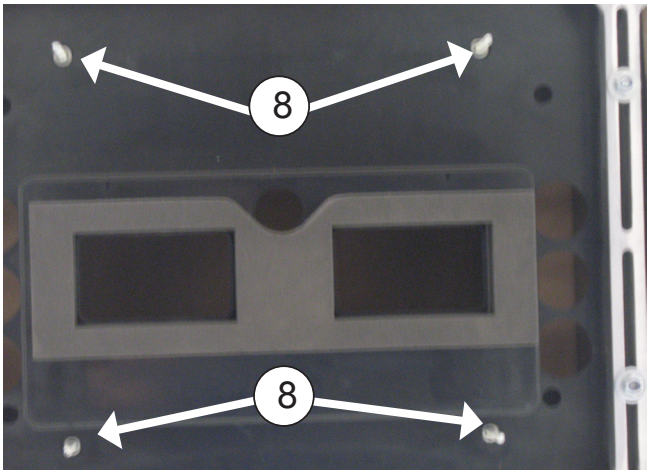


7 Befestigungsauflagen (2) mit einer Unterlegscheibe (1) und einer Autobloc-Mutter (1) M8 einlegen, **jedoch ohne anzuziehen**.

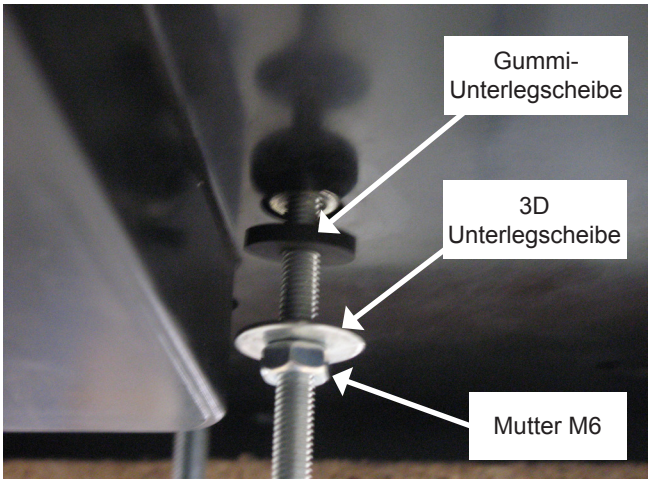


8 10 mm Gewinde für die Stiftschrauben (4) M6 x 80 am angegebenen Punkt schneiden laut Distanz (D) beschrieben in Abbildung 10.

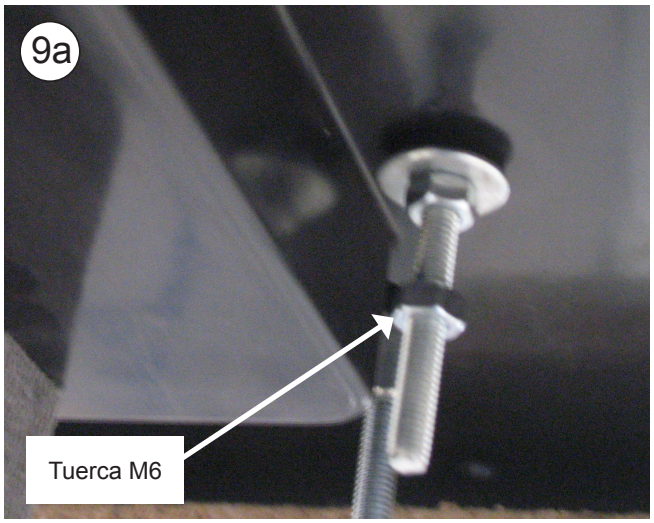




9 Montiere (1) Gummi-Unterlegscheibe, (1) 3D Unterlegscheibe (1) Mutter auf jede Gewindestange. Später ziehen Sie die Mutter an, bis die Gummischeibe ein wenig zusammengepresst ist.

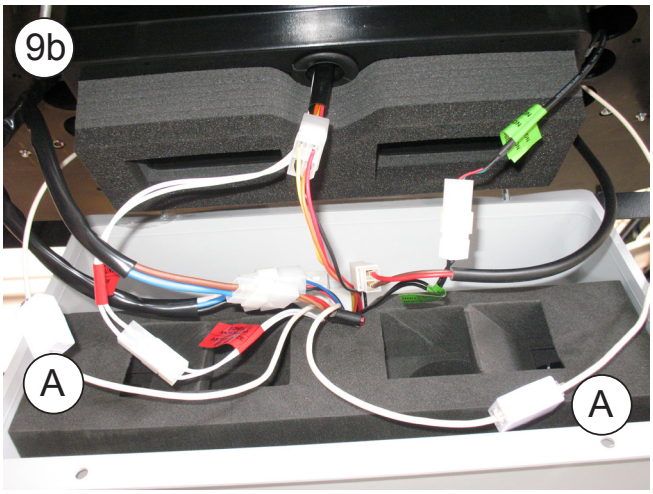


9a Jeweils die Mutter (1) M6 **ohne Anziehen** auf die Stiftschrauben legen.

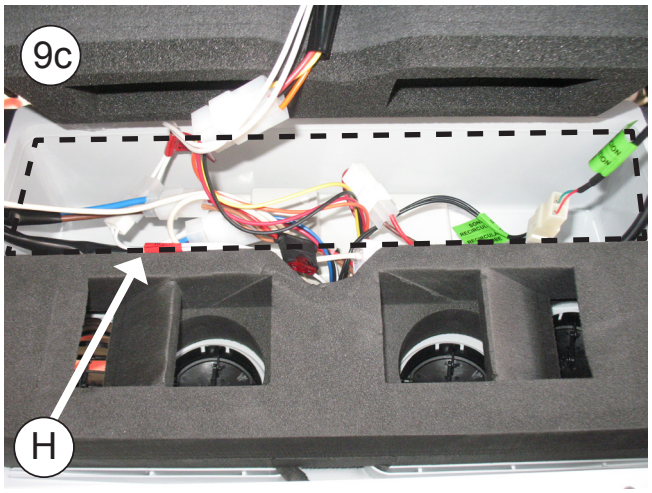


9b (2)Kommunikationskabel A, die (2) 4 Wege- und (4) 2 Wege-Kästen der Frontseite mit dem **Compact** entsprechend verbinden.

Dabei beachten, dass der mit den weißen Kabeln markierte Zwei-Wege-Kasten an dem im mittleren Bereich des Geräts mit den weißen Kabeln heraustretenden Stecker anzuschließen ist.

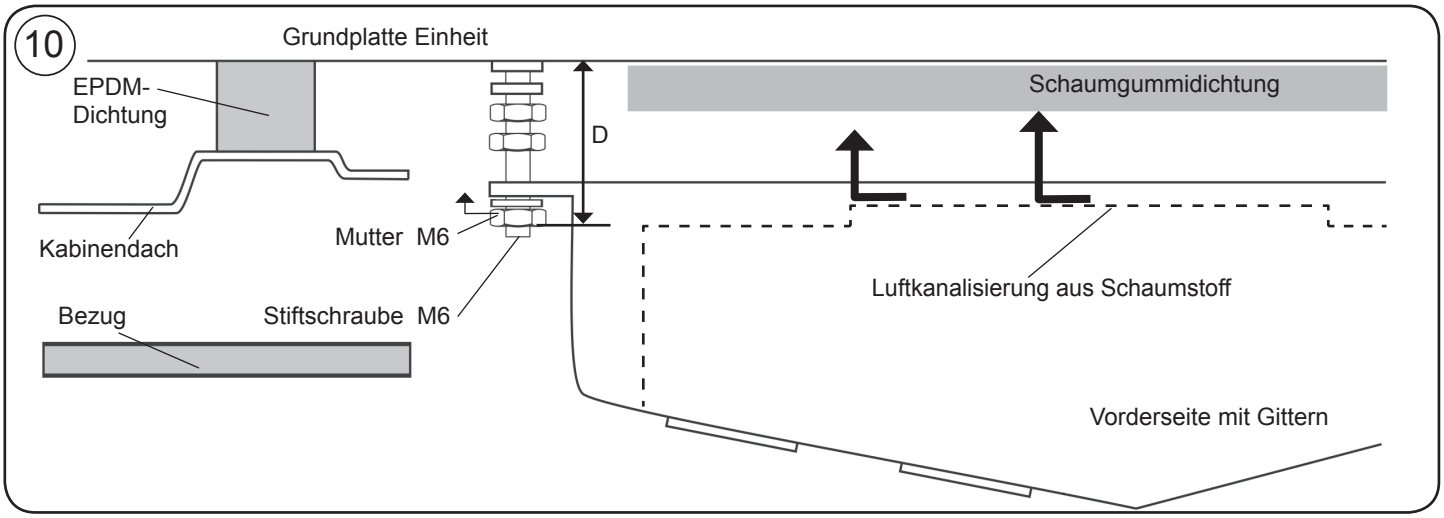


9c Kabel in die an der Frontseite vorhandene Öffnung einführen (**H**), um die Einstellung der Kanalisiereinrichtungen an der Gerätebasis nicht zu stören.

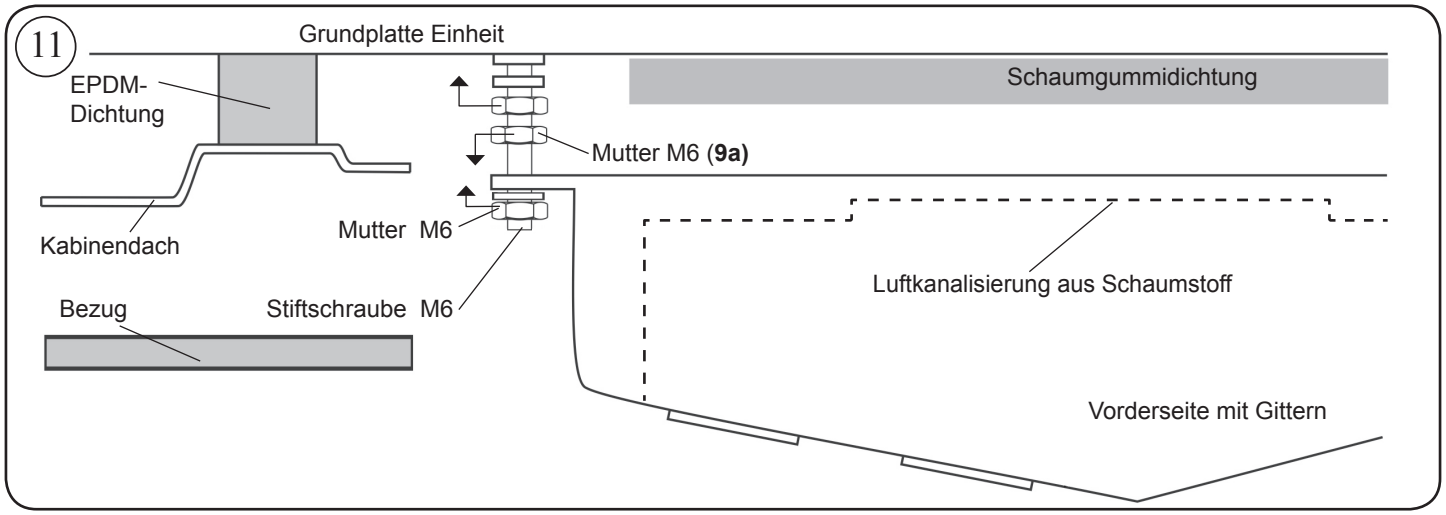


10 Montieren Sie die das Gehäuse mit der Elektronik auf die Gewindestangen. Befestigen Sie dieses mit einer (1) 3D Unterlegscheibe, (1) und einer Mutter. Ziehen Sie die Muttern fest, bis sich das Schaumgummi und die Luft-Kanalisierung berühren.

Wichtig: Der Schaumstoff und die Luftkanalisierung müssen sich berühren, um Falschluft zu verhindern.



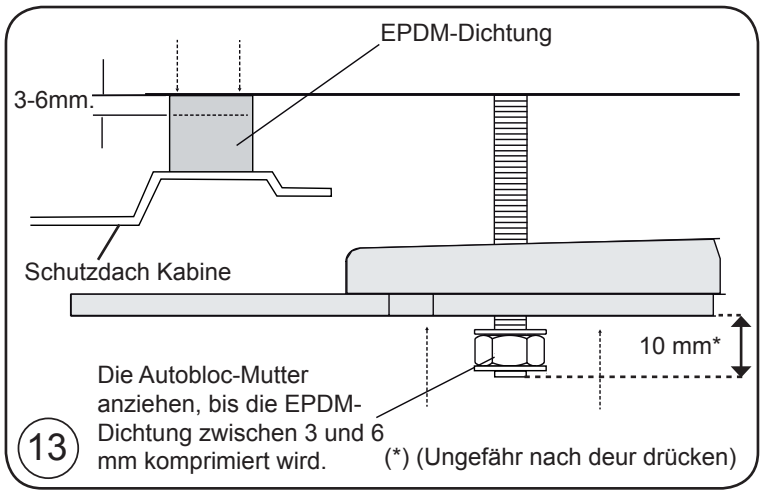
11 Die in Punkt **9a** angegebene Mutter anziehen, bis diese die obere Fläche der Vorderseite berührt.

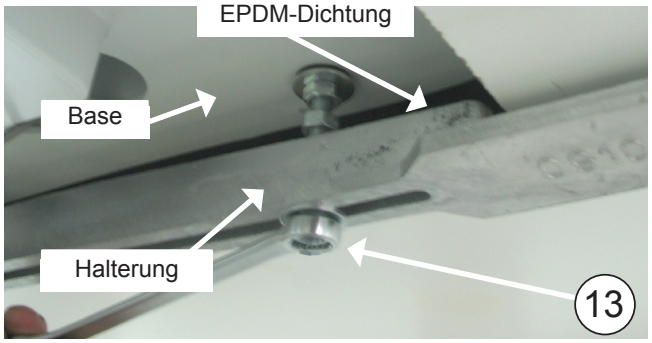


12 Konsole mit Originalschrauben heften und **Compact** in der korrekten Position zentrieren.

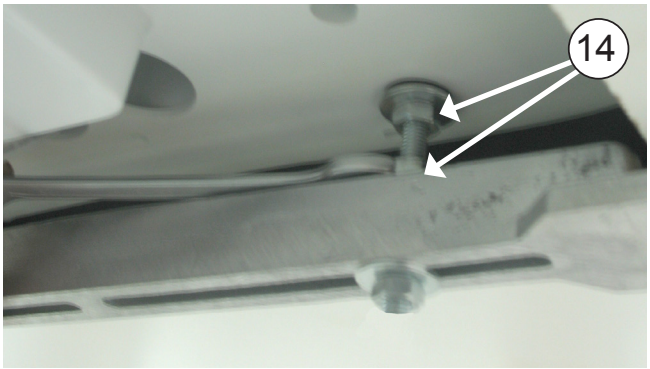
13 Die Halterungen durch Anziehen der Muttern befestigen, bis die EPDM-Dichtung (**Punkt 4a**) des Geräts zwischen 3 und 6 mm komprimiert wird.

Wichtiger Hinweis: Um das Eindringen von Wasser in die Kabine zu verhindern, die die Verbindung der EPDM-Dichtung mit der Grundplatte des Compact wie in **Schema** gezeigt überprüfen.



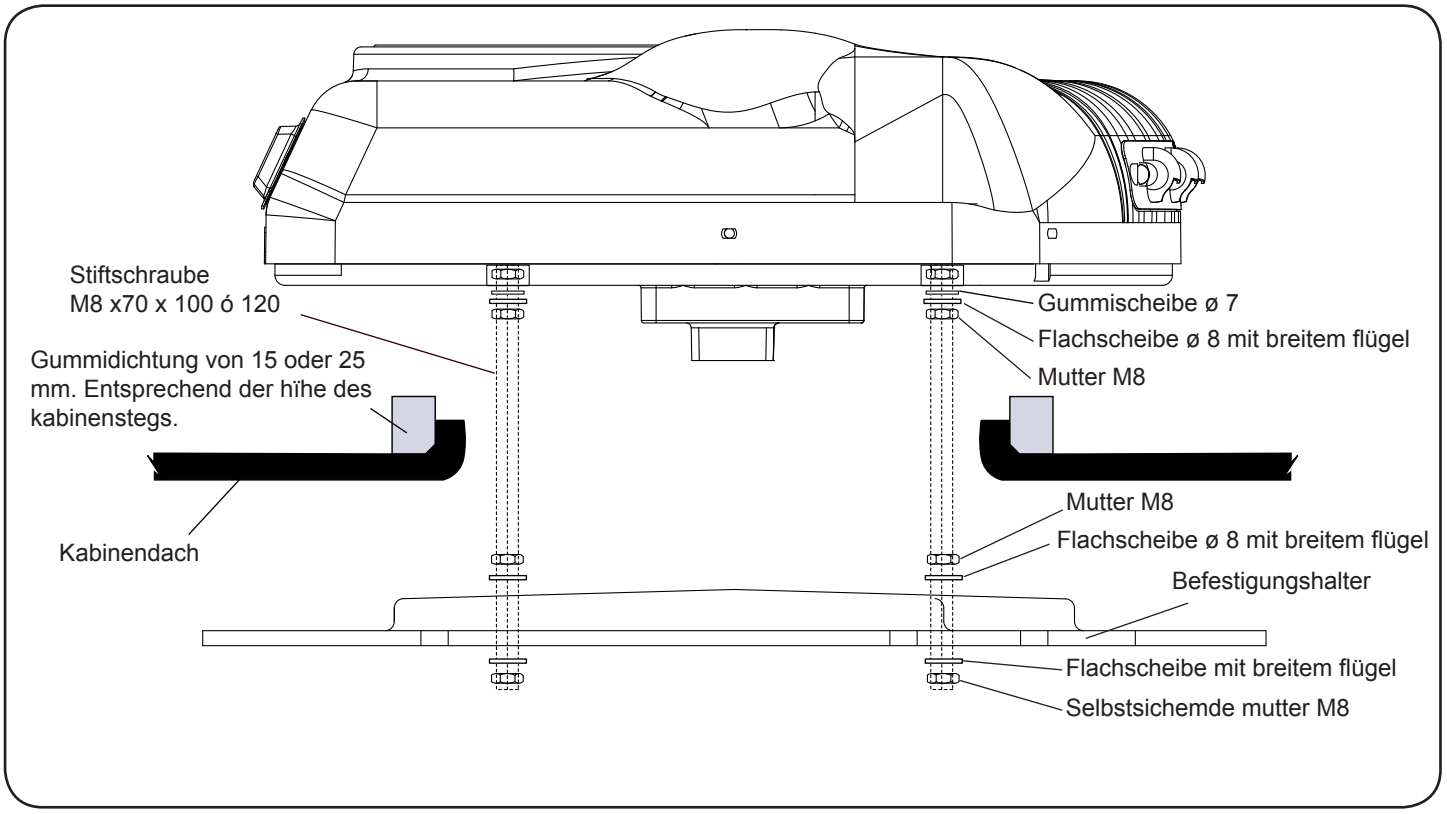


14 Die Muttern (4) M8 anziehen, um sie an der Grundplatte zu befestigen.

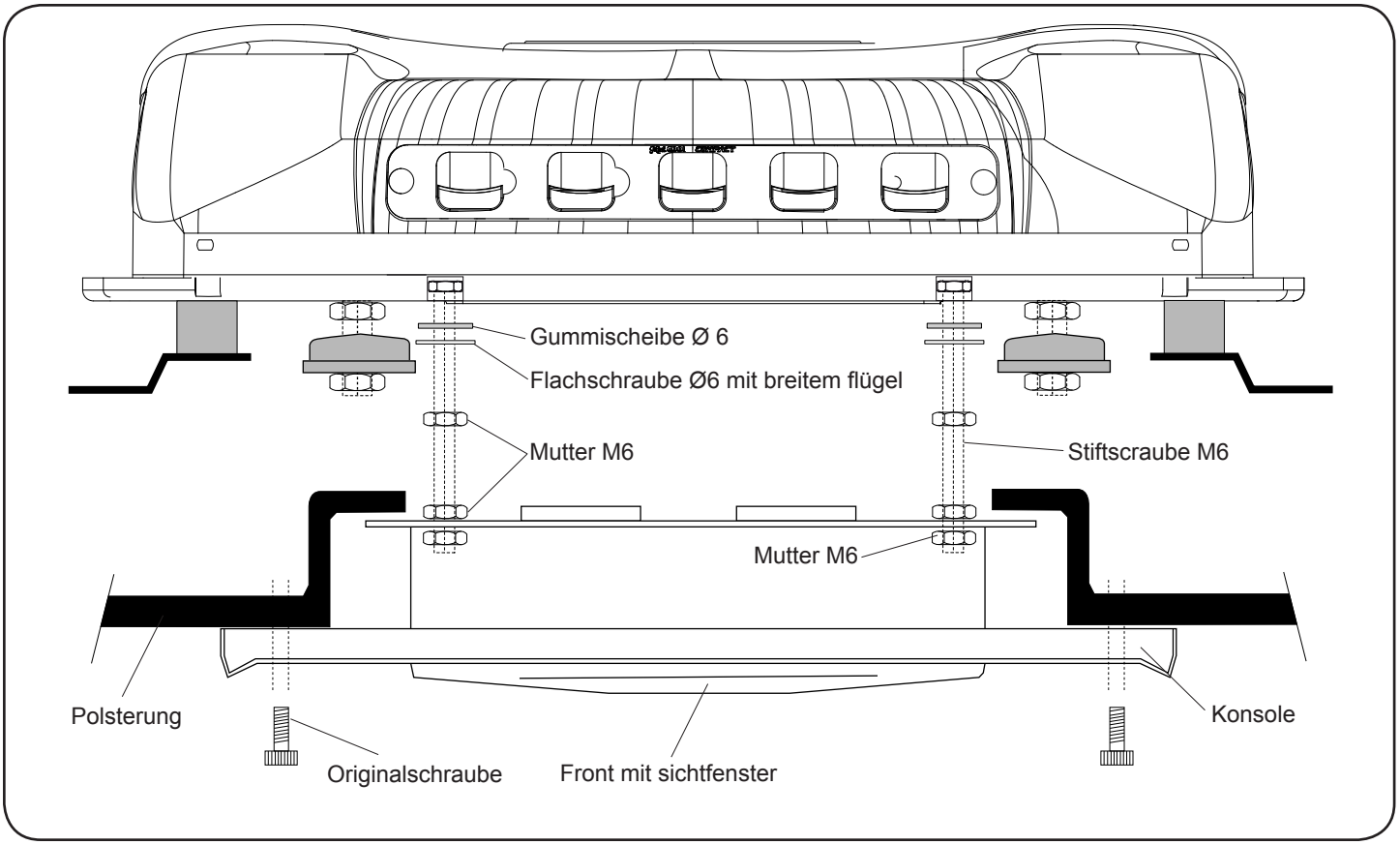


15	Befestigen Sie die Console mit 4 originalen Schrauben.

Explosionszeichnung bis zur befestigung der halter

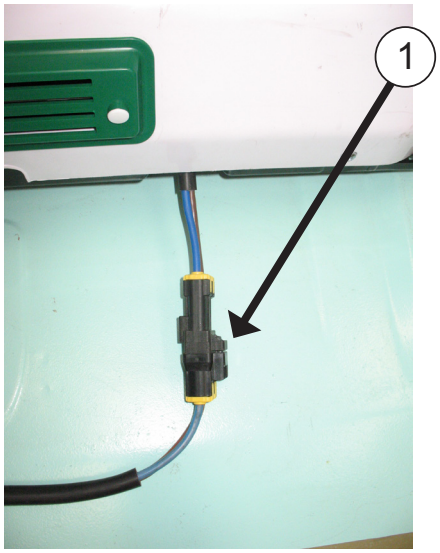


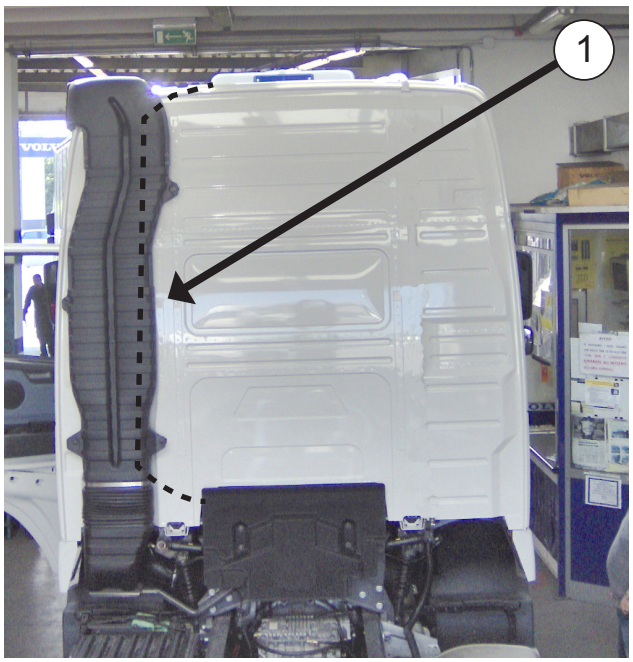
Explosionszeichnung bis zur befestigung der konsole



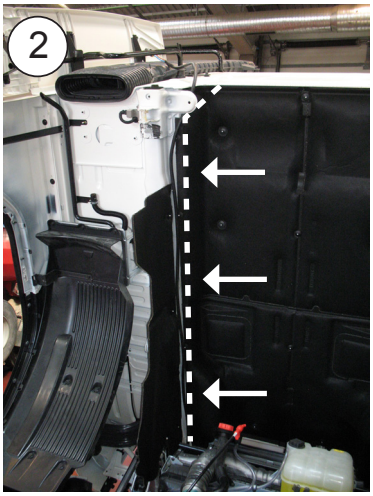
Detaillierte Anleitung für die Installation des Speisekabels

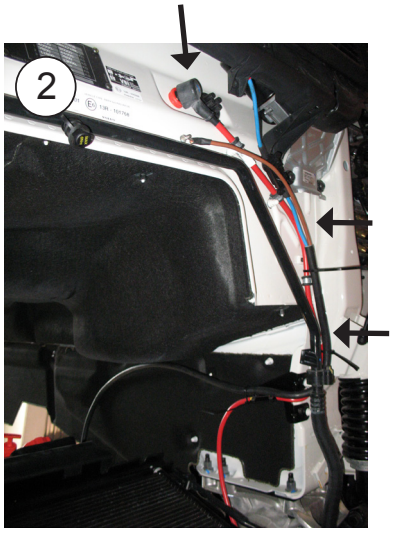
1 Speisekabelklemme an die Geräteklemme anschließen und das Kabel hinter der Zuführleitung durchführen.

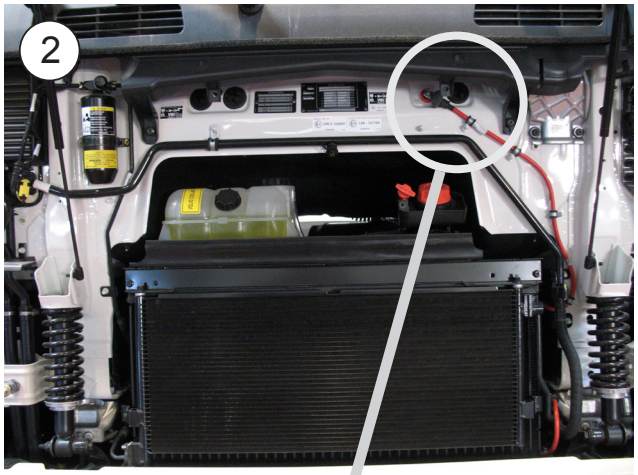


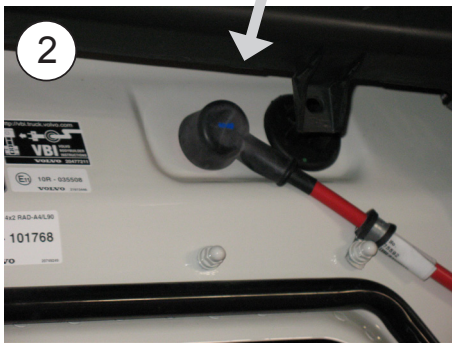


2 Kabine herunterklappen und das Kabel an der gezeigten Stelle bis zum Positivanschluss an der Vorderseite der Kabine entlang führen.

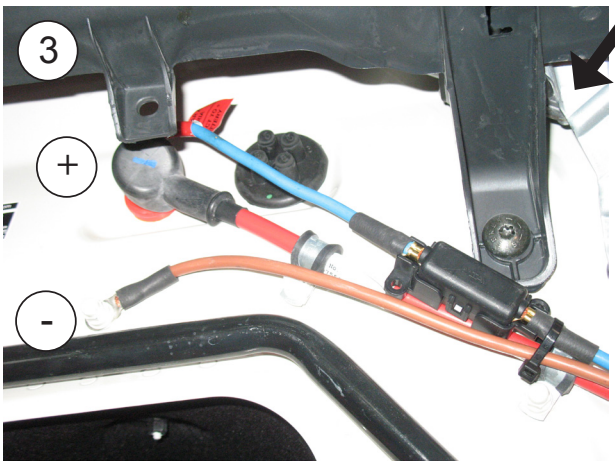


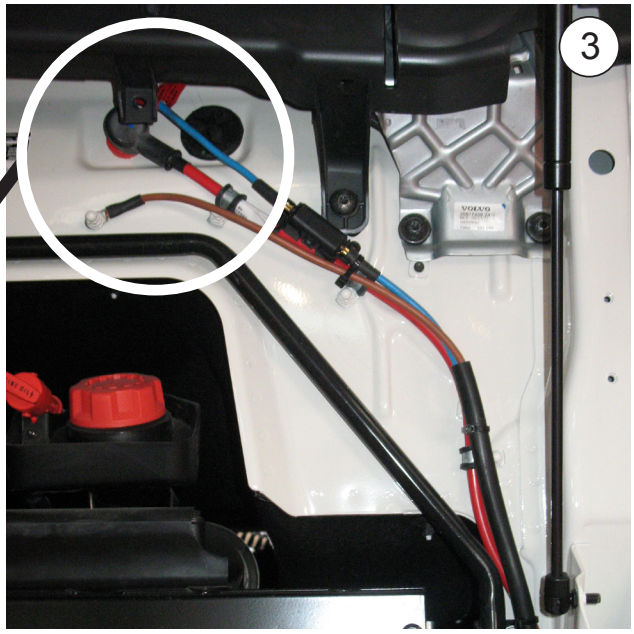




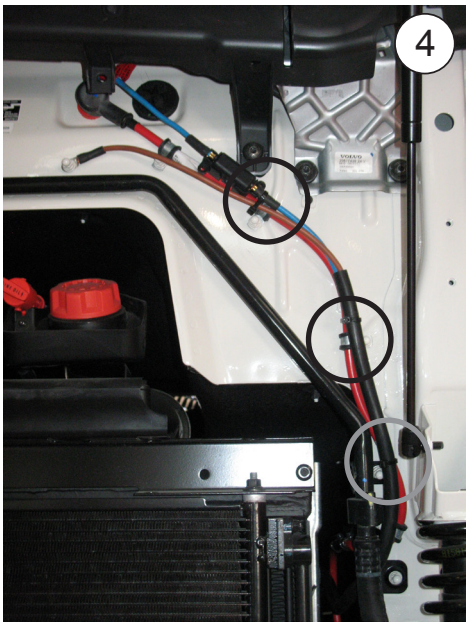


3 Mutter M6 und Mutter M8 des Positivanschlusses (+) abnehmen und Speisekabel wie gezeigt anschließen.





4 Kabel mit Kabelklemmen am Originalkabel befestigen.



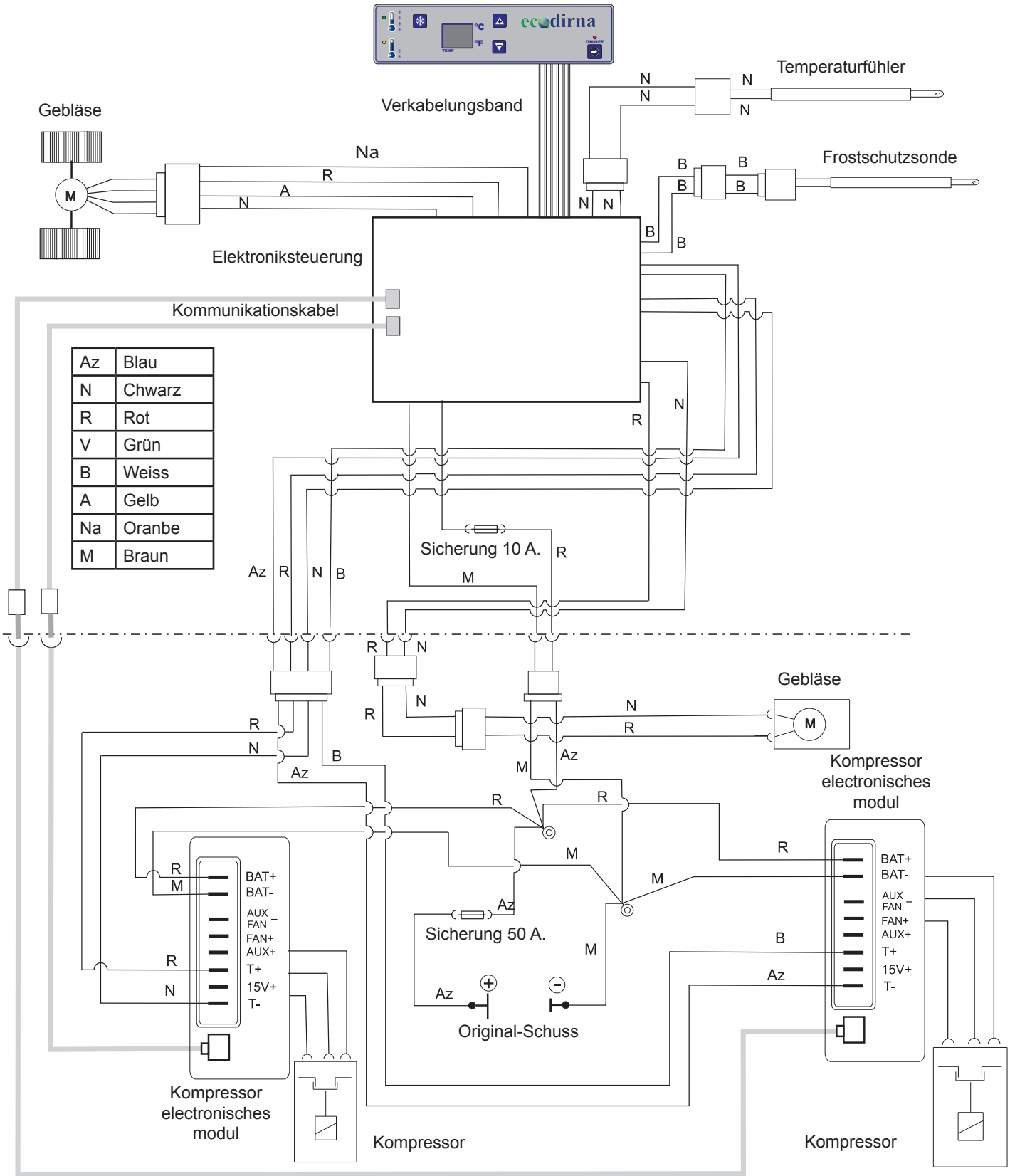
5 An der Unterseite mit Schellen an Original-Stiftschrauben befestigen.

6	Kabine herunterklappen und in Fahrtposition lassen, überschüssiges Kabel hinter die Zuführleitung stecken.

ElektrischeVerkabelung

WICHTIGER WARNHINWEIS!

Darauf achten, dass die Polaritäten beim Anschluss der Stromversorgung an das Gerät nicht vertauscht werden. Ist dies der Fall, schaltet sich die Elektroniktafel nicht ein, das Gerät funktioniert nicht und es kommt zu irreparablen Schäden an den Kompressormodulen.



Suggerimenti per il montaggio

- Prima di cominciare il montaggio, leggere attentamente le istruzioni e rispettarle nel corso dello stesso.
- Usare gli attrezzi più adatti ad ogni operazione.

Elettricitá

- Scollegare la chiave di contatto.
- Scollegare la batteria prima di cominciare il montaggio.
- Assicurarsi di aver effettuato correttamente l'installazione e il collegamento dei componenti elettrici.

⚠ Attenzione

Se durante il montaggio si inclina l'impianto, prima di rimetterlo in funzione occorre attendere almeno 60 minuti dal momento in cui è di nuovo in posizione orizzontale.

⚠ Attenzione

Quando si installa l'impianto di aria condizionata sul tettuccio, bisogna proteggere la parte superiore della cabina con uno straccio o una coperta per evitare eventuali graffi. Per l'installazione del **Compact**, tenere presente che normalmente le cabine munite di oblò dispongono di una struttura abbastanza solida per sostenere il peso dell'impianto. Tuttavia, se così non fosse e se fosse necessario tagliare il tettuccio, o se in presenza di oblò la struttura non fosse abbastanza rigida (se fosse di fibra, plastica, ecc.), è responsabilità dell'installatore decidere se occorre rinforzare il tettuccio per evitare qualsiasi deformazione, rottura o penetrazione d'acqua, ecc., prendendo le misure necessarie per evitarlo.

Attrezzi

Kit di chiavi Torx
Kit di chiavi Allen
Chiave fissa 10, 13, 14
Forbici
Metro a nastro

Documentazione allegata

Istruzioni di montaggio	220.AA2.3001
Guida dell'utente	220.AA6.0057
Soluzione dei problemi	220.AA6.0058
Garanzia	220.AA1.0017

Simbologia

Fragile

Attenzione alle mani

Tensione elettrica pericolosa

⚠ Avvertenze

⚠ L'installatore deve essere in possesso della formazione necessaria in materia di aria condizionata per veicoli.

⚠ **dirna Bergstrom, s.l.** declina ogni responsabilità per danni o rotture derivanti dall'errata installazione o dall'errato uso dell'impianto o da sostituzioni o modifiche effettuate senza la necessaria autorizzazione per iscritto.

⚠ **Impianto precaricato con gas refrigerante. (*Non manomettere il circuito di gas refrigerante*).**

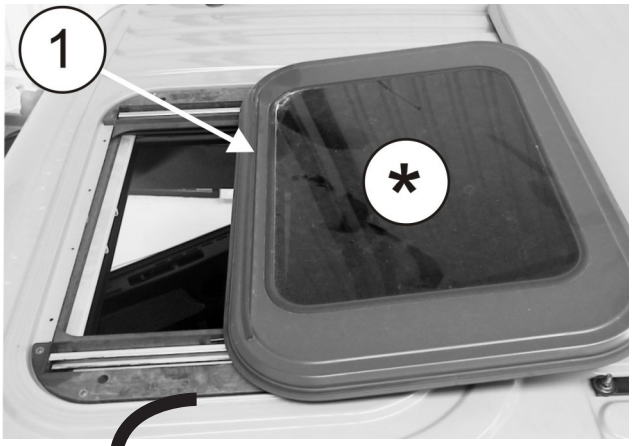
⚠ Vedi la **procedura di garanzia** del prodotto in **Diagnosi dei problemi**.

⚠ Vedi la **Guida dell'utente** dell'impianto per il corretto funzionamento del telecomando e del pannello di controllo.

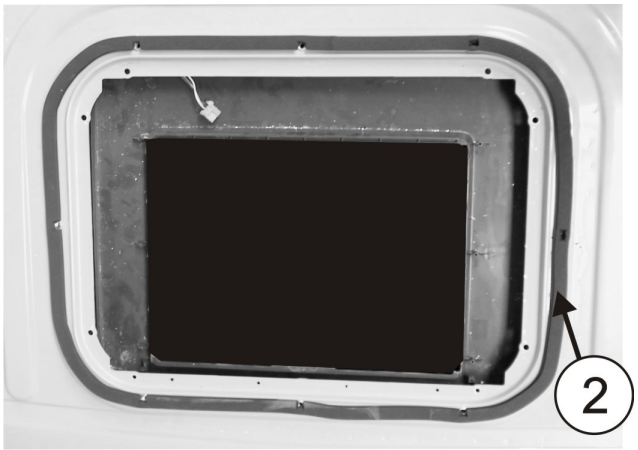
⚠ I seguenti documenti devono essere consegnati all'utente una volta conclusa l'installazione: **Guida dell'utente, Garanzia e Diagnosi dei problemi.**

⚠ Prima di iniziare il montaggio, installare la griglia sull'entrata anteriore dell'aria.

1 Desmontar tapa escotilla, marco interior y entregar al cliente



2 Incollare guarnizione EPDM di 30x25mm, intorno al taglio o al vano del tettuccio.

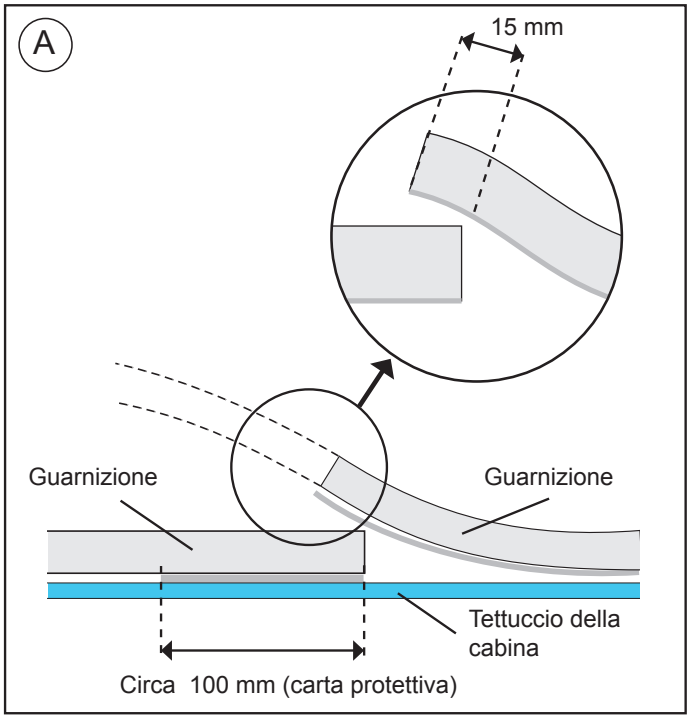


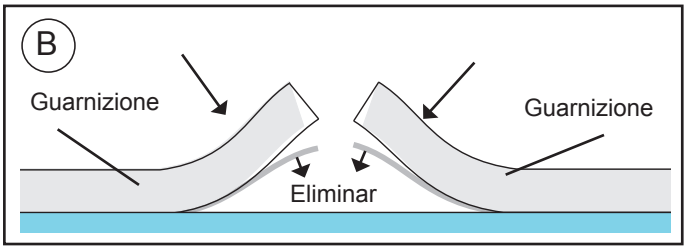
COME TAGLIARE LA GUARNIZIONE EPDM PER EVITARE INFILTRAZIONI NELLA CABINA

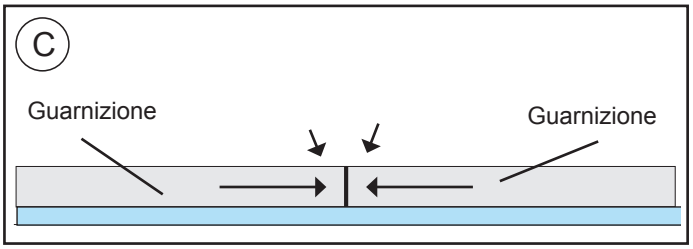
A- Incollare la guarnizione mantenendo una protezione di carta di 100 mm su ogni lato.

B- Rimuovere i due pezzi di carta.

C- Incollare premendo su entrambe le estremità.





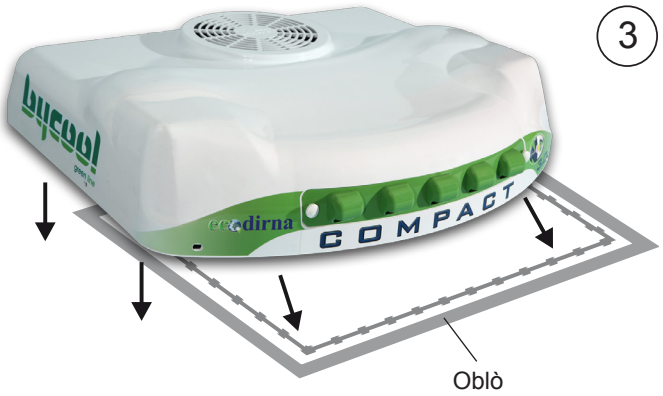


3

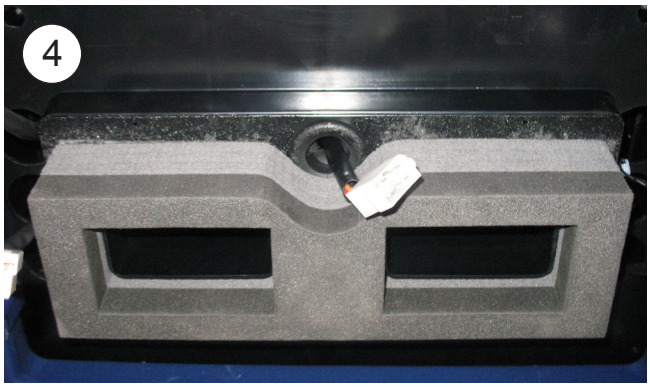
ESTERNO CABINA:

Collocare il **Compact** nel vano.

Attenzione! Quando si posiziona l'impianto sul vano del tettuccio apribile, controllare che le uscite di scarico non siano ostruite dalla guarnizione EPDM.

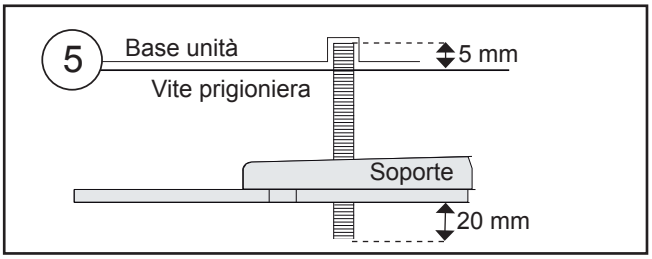


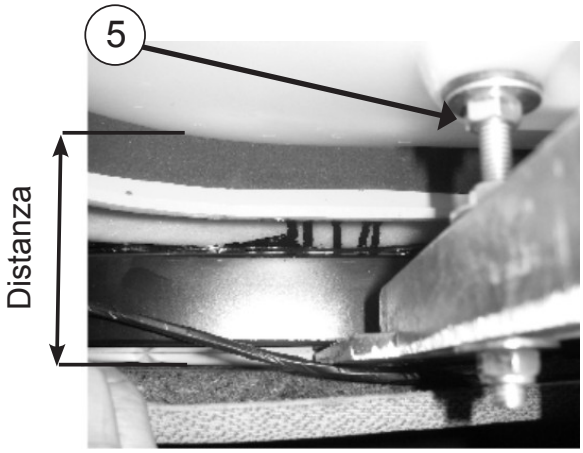
4 Montare il canalizzatore di gommapiuma con la parte più morbida sulla base dell'impianto.



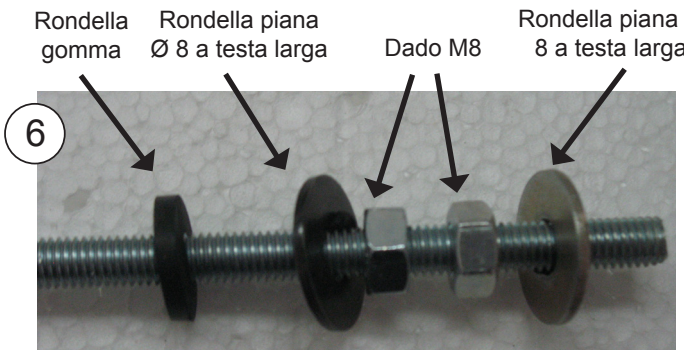
5 **INTERNO CABINA:**

Avvitare di circa 5 mm le (4) viti prigioniere da 8/125x70, 100 o 120 mm, a seconda della distanza (maggiore o minore) dall'impianto finché, posizionando i supporti di fissaggio, le viti non sporgono di 20 mm dagli stessi.

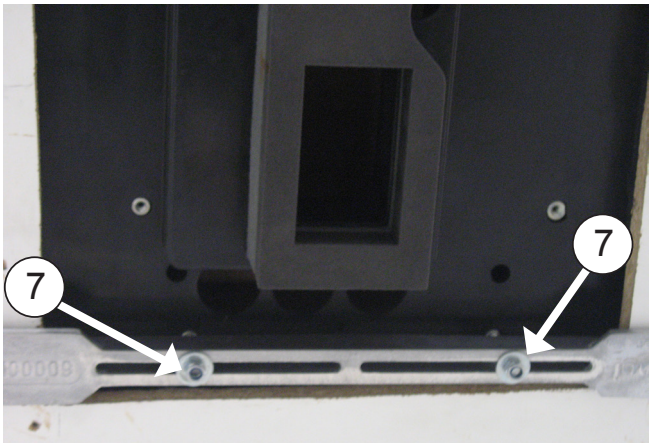




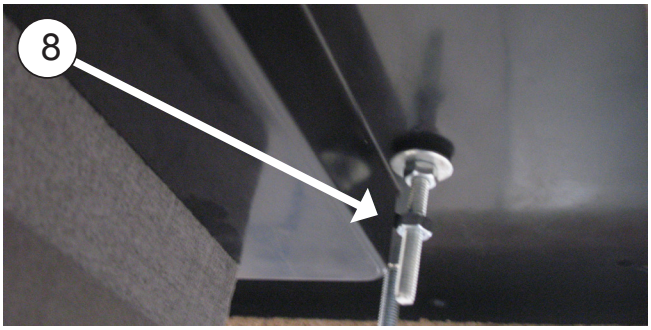
6 Inserire (8) rondella di gomma Ø 7, (1) rondella piana Ø 1 a testa larga, (2) dadi M8 e (1) rondella piana Ø 8 a testa larga, su ciascuna vite prigioniera precedente, seguendo questo ordine.

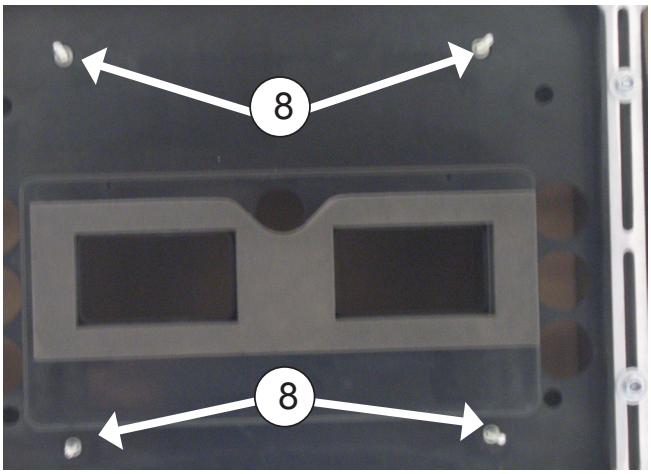


7 Fissare i supporti di fissaggio (2), con una rondella (1) e un dado autobloccante (1) M8, **senza stringere**.

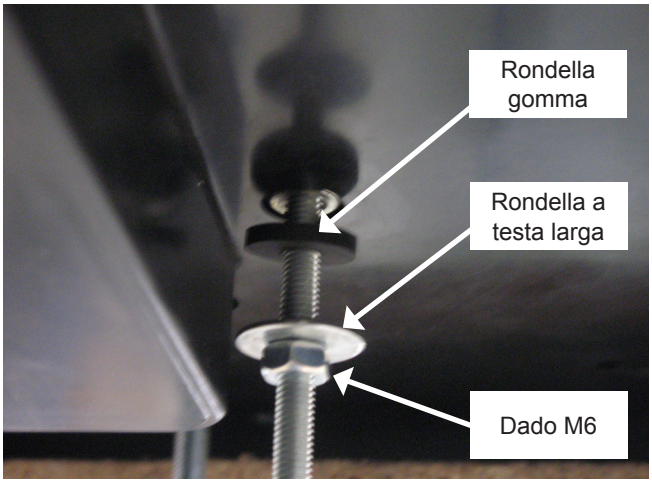


8 Avvitare di 10 mm i perni (4) M6 x 80, dove indicato distanza (A) segun nella a figura 10.

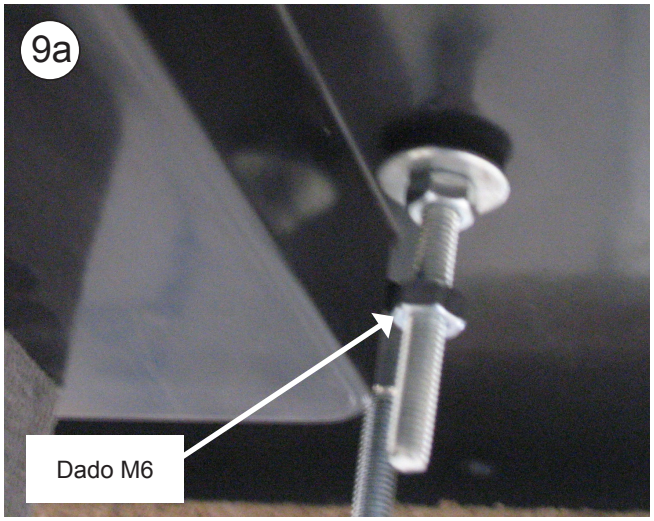




9 Inserire (1) rondella Ø 6 di gomma, (1) rondella piana Ø 6 a testa larga e (1) dado M6 su ogni vite prigioniera M6. Quindi stringere il dado fino a premere leggermente la rondella di gomma.

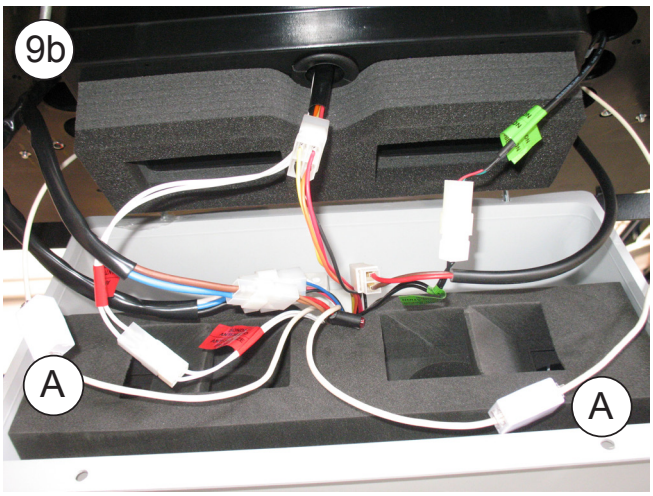


9a Inserire il dado (1) M6 **senza stringere** in ogni vite prigioniera.

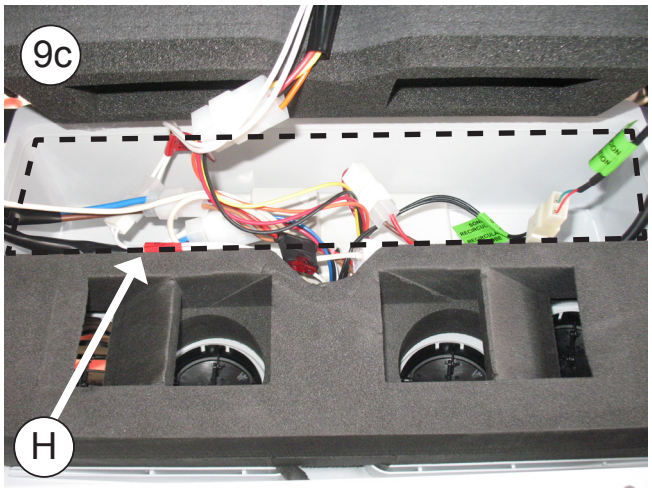


9b Collegare i (2) cavi di comunicazione A, le (2) scatole a 4 vie e (4) a 2 vie, della parte frontale, al **Compact**.

Tenere conto che la scatola a due vie contrassegnata con i cavi bianchi si collega al connettore con i cavi bianchi che esce dalla parte centrale dell'impianto.

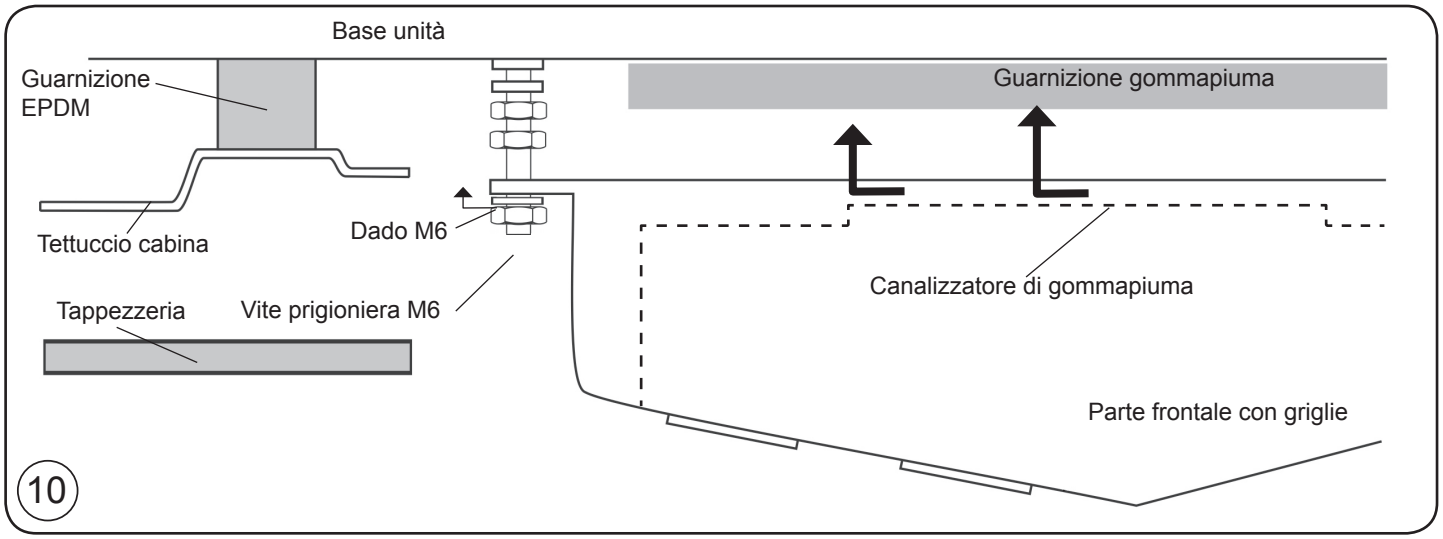


9c Inserire i cablaggi nel vano esistente (H) sulla parte frontale per non interferire con la base dell'impianto nella regolazione dei canalizzatori.

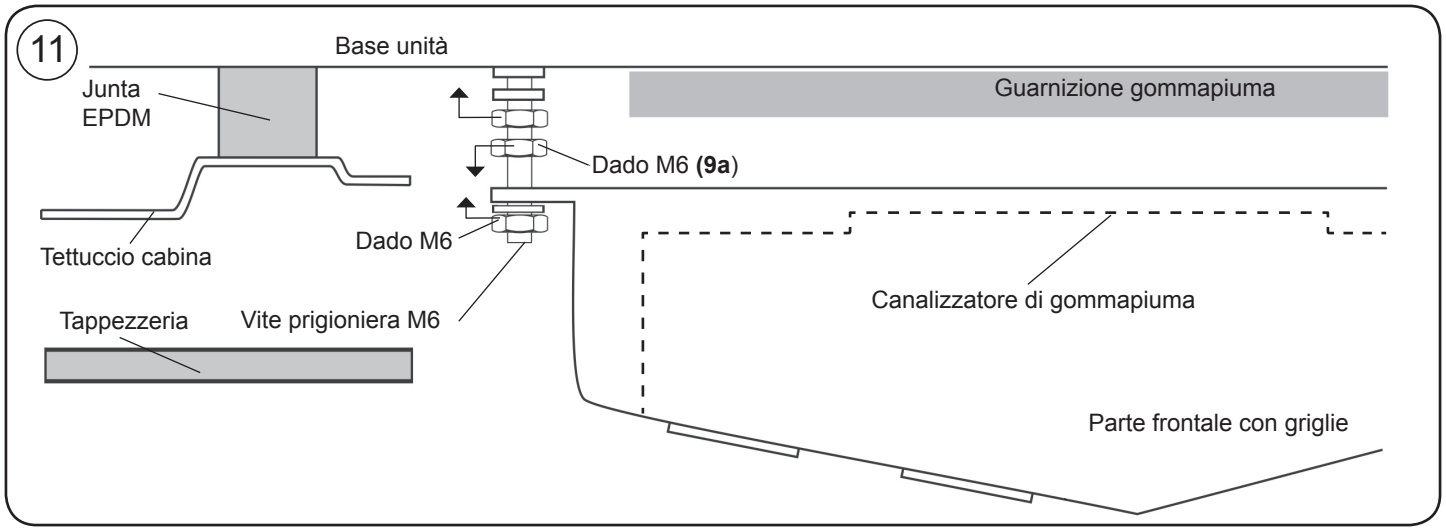


10 Posizionare il frontalino sulle viti prigioniere precedenti con (1) rondella M6 a testa larga e (1) dado M6 su ogni vite prigioniera. Stringere i dadi finché il canalizzatore non è a battuta sulla gommapiuma superiore dell'impianto.

Nota bene: Il canalizzatore di gommapiuma deve essere a battuta contro la gommapiuma superiore dell'impianto per evitare perdite d'aria.



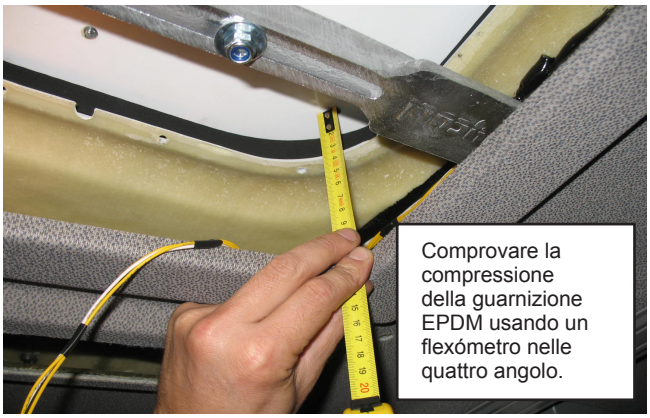
11 Stringere il dado indicato al punto **9a** finché non tocca la superficie superiore della parte frontale.

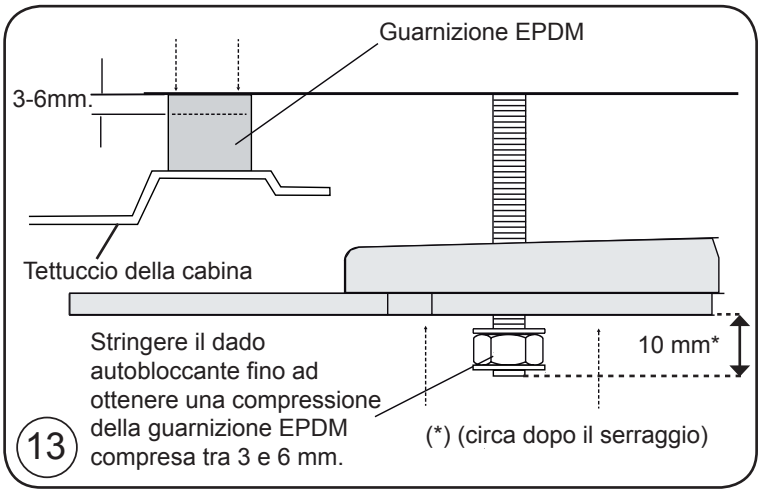


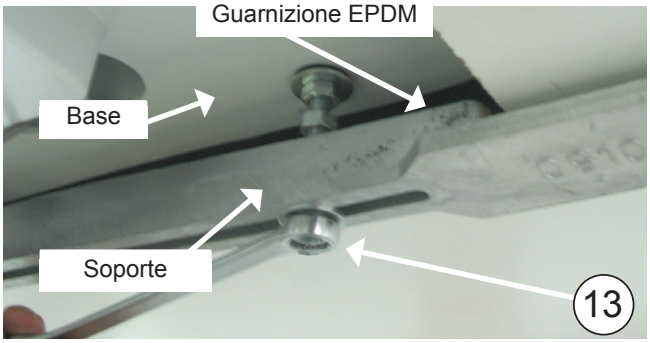
12 Collocare la consolle con viti originali e centrare il Compact nella posizione più deguata.

13 Fissare i supporti stringendo i dadi fino a comprimere, tra 3 e 6 mm, la guarnizione EPDM dell'impianto.

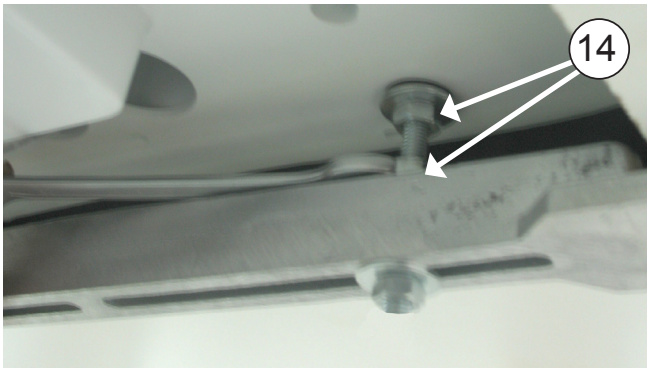
Nota bene: Per evitare che infiltrazioni d'acqua nella cabina, verificare il serraggio della guarnizione EPDM con la base Compact base, come illustrato nel Diagramma.


Comprovare la compressione della guarnizione EPDM usando un flexómetro nelle quattro angolo.


Guarnizione EPDM
3-6mm.
Tettuccio della cabina
Stringere il dado autobloccante fino ad ottenere una compressione della guarnizione EPDM compresa tra 3 e 6 mm.
10 mm*
(*) (circa dopo il serraggio)
13

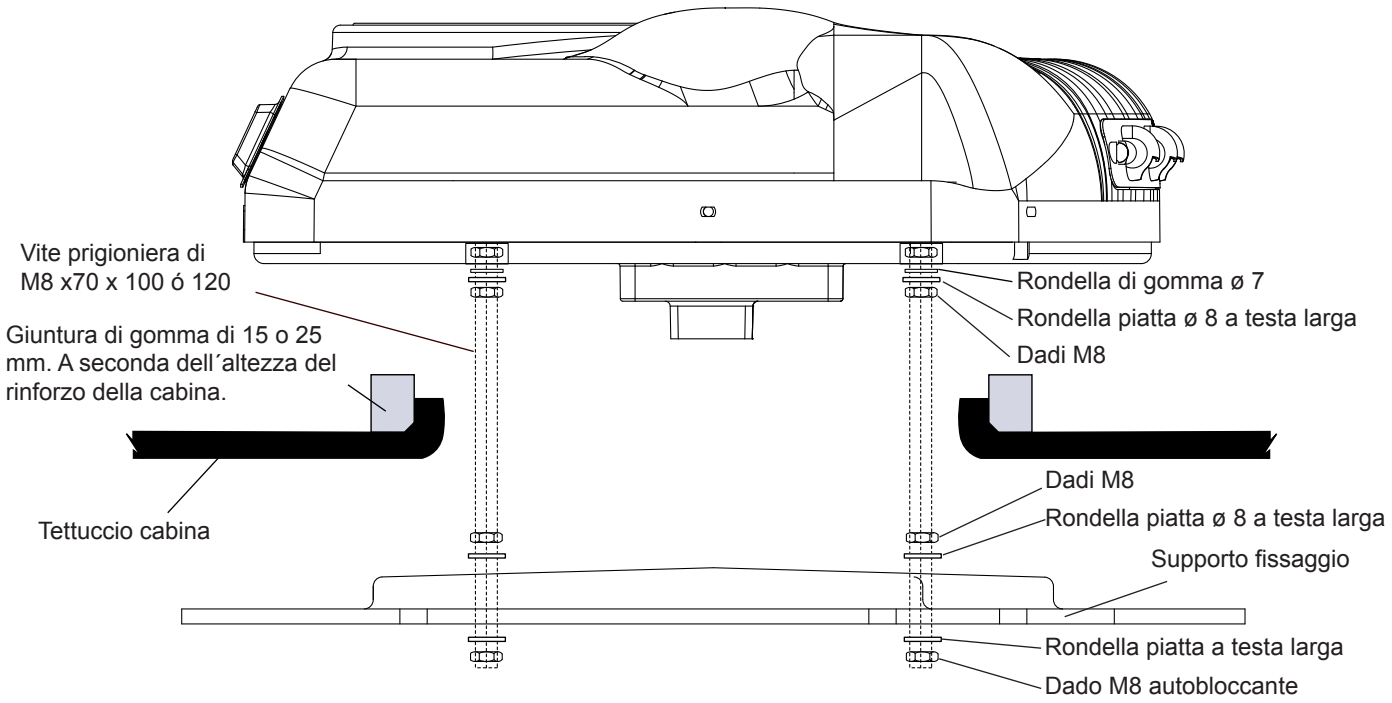


14 Stringere i dadi (4) M8 per fissare a (4) l'unità base.

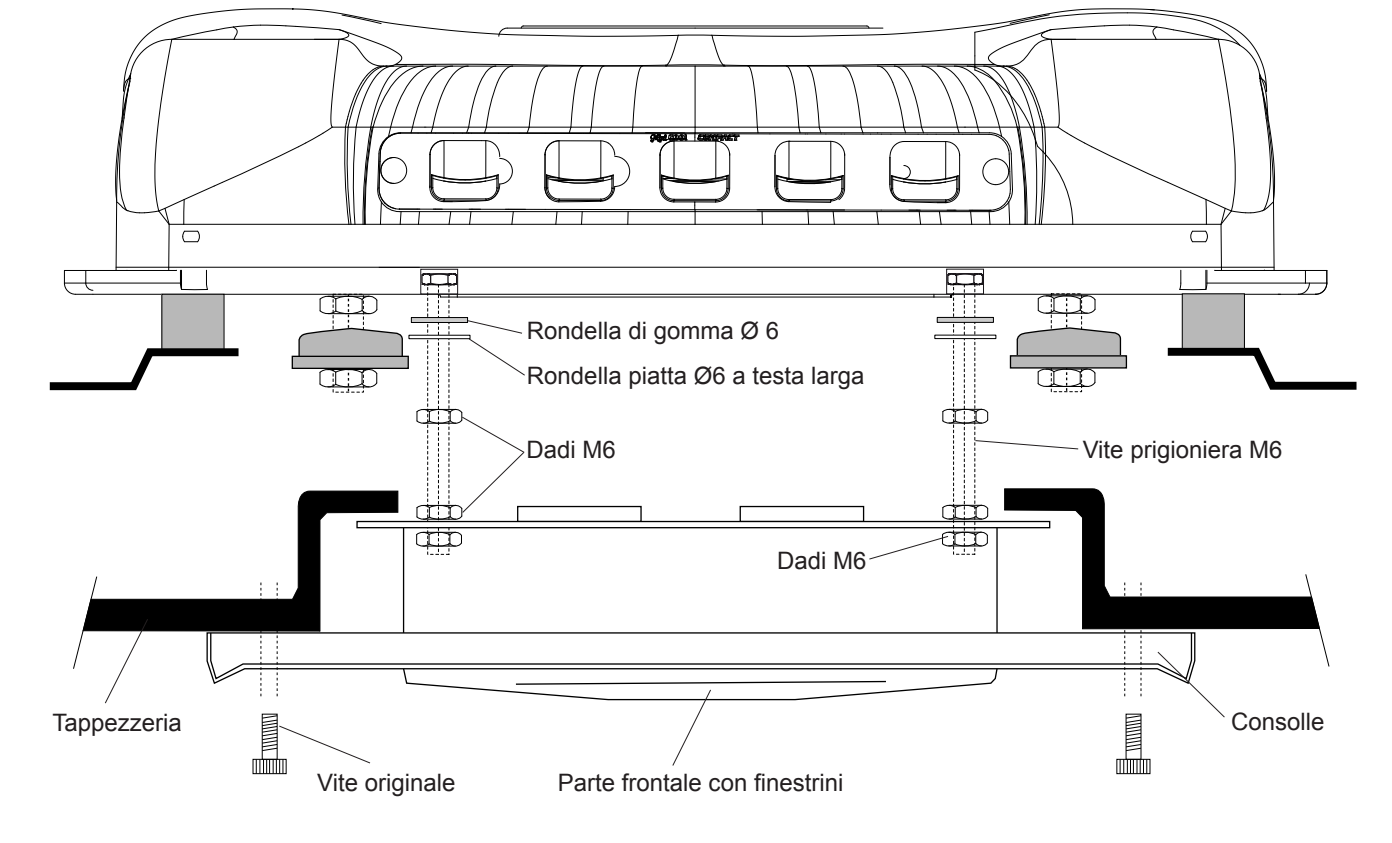


15	Luogo console con 4 viti originale.

Vista dettagliata fino al fissaggio dei supporti

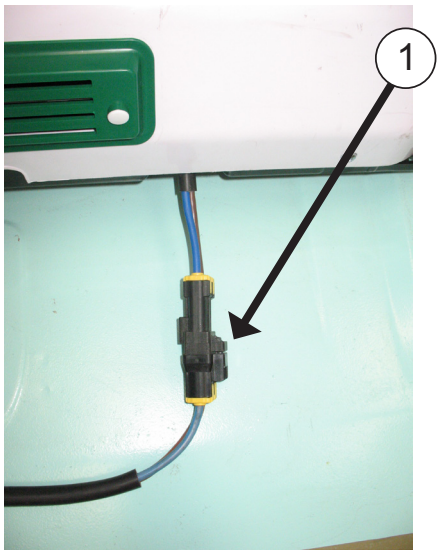

Vite prigioniera di
M8 x70 x 100 ó 120
Giuntura di gomma di 15 o 25
mm. A seconda dell´altezza del
rinforzo della cabina.
Tettuccio cabina
Rondella di gomma ø 7
Rondella piatta ø 8 a testa larga
Dadi M8
Dadi M8
Rondella piatta ø 8 a testa larga
Supporto fissaggio
Rondella piatta a testa larga
Dado M8 autobloccante

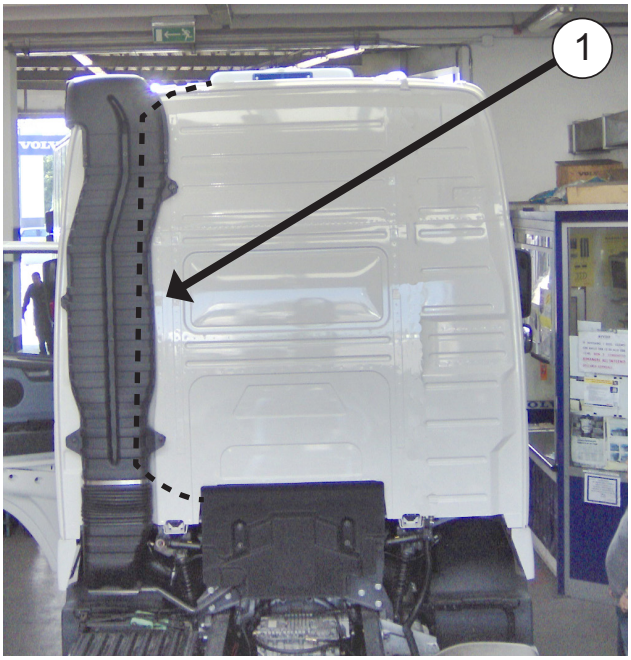
Vista dettagliata fino al fissaggio della consolle



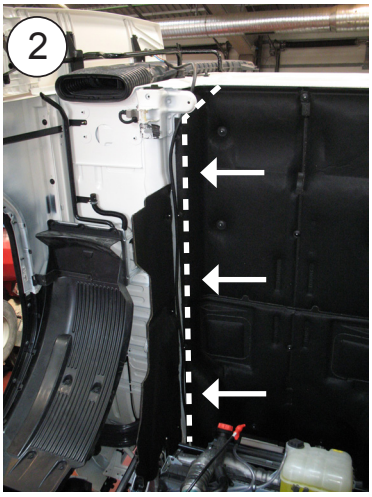
Istruzioni particolareggiate per l'installazione del cavo di alimentazione

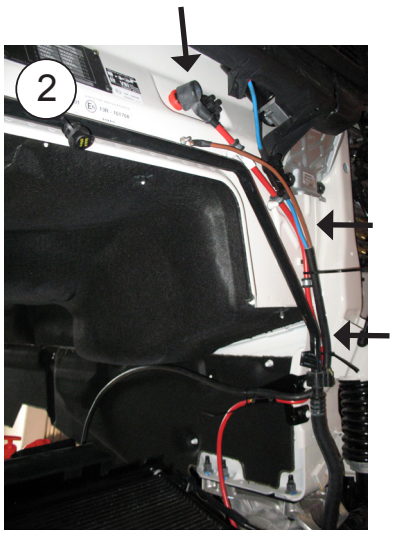
1 Collegare il morsetto del cavo di alimentazione con il morsetto dell'impianto e fare passare il cablaggio dietro il tubo di aspirazione.

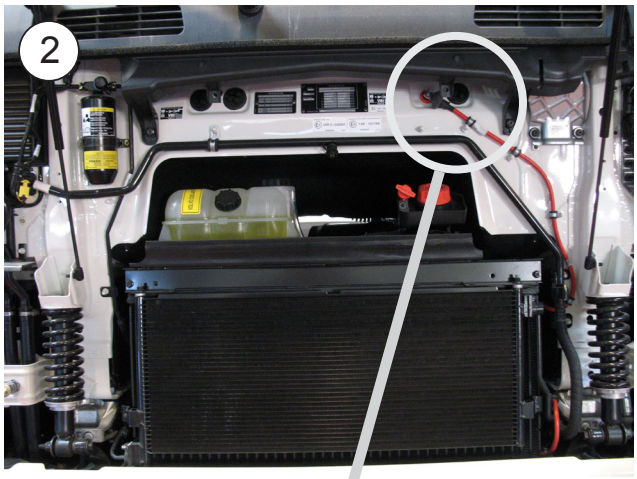


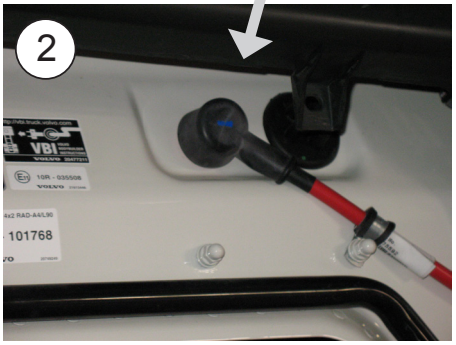


2 Ribaltare la cabina e condurre il cavo dal sito indicato fino alla presa (+) situata nella parte anteriore della cabina.

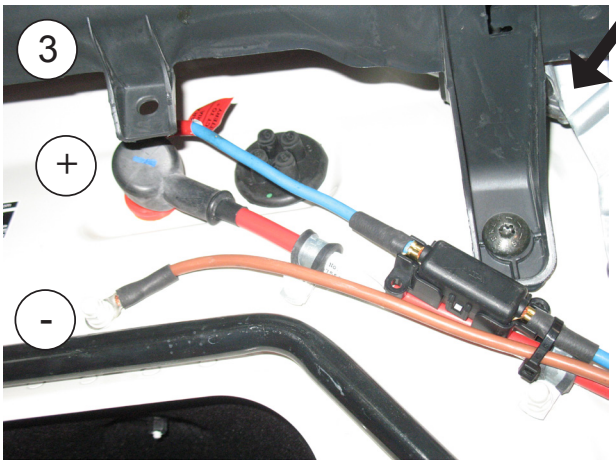


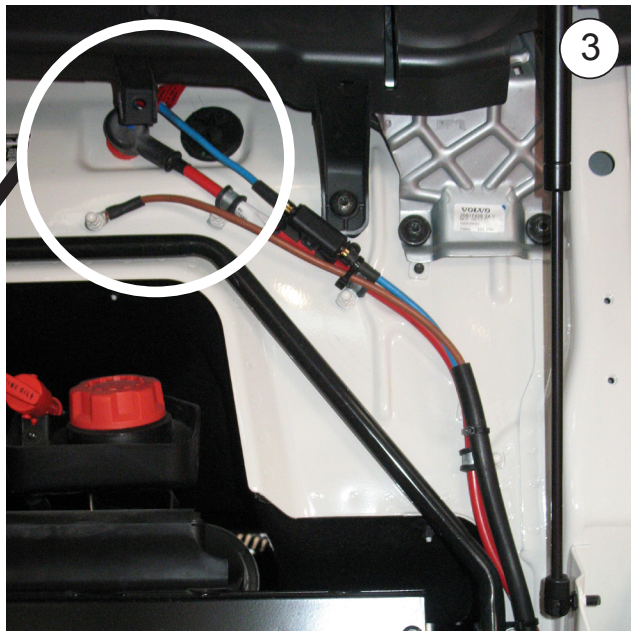




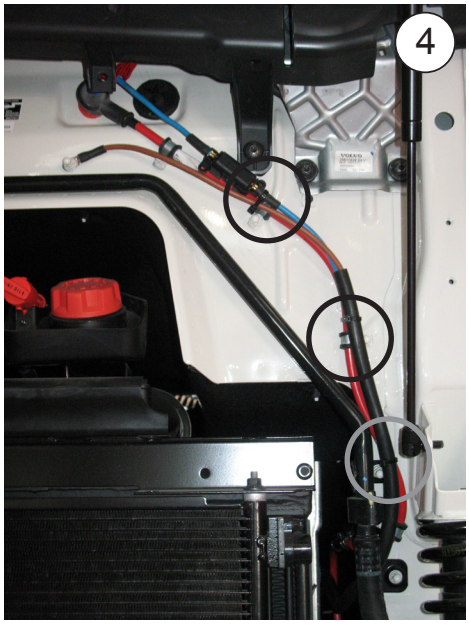


3 Smontare il dado M6 e il dado M8 della presa (+) e collegare il cavo di alimentazione come indicato.





4 Con le flange fissare il cavo a quello originale.



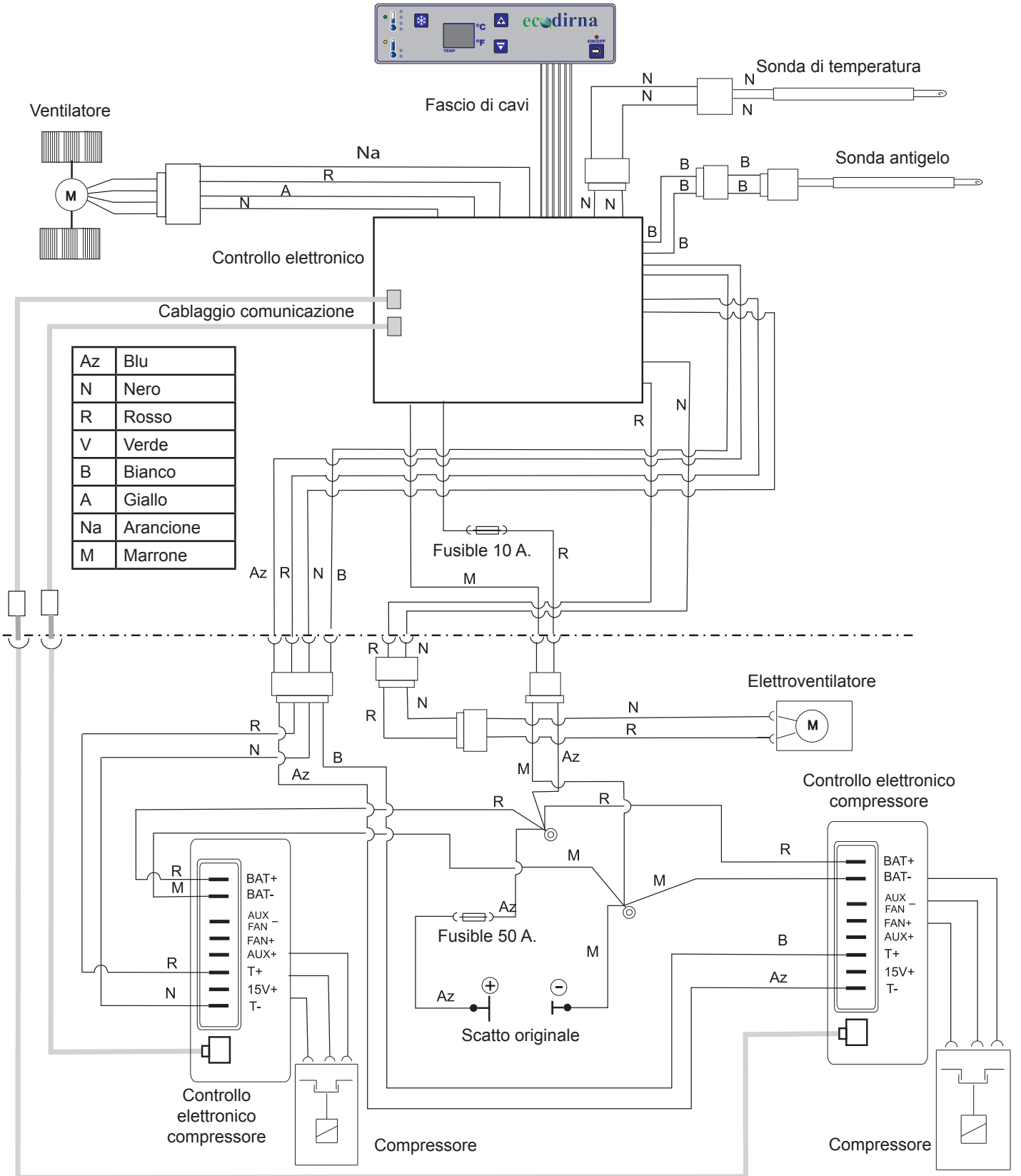
5 Nella parte inferiore, fissare con fascette alle viti prigioniere originali.

6	Ribaltare la cabina e lasciare in posizione di avvio, nascondere il cavo che avanza dietro il tubo di aspirazione.

Cablaggio elettrico

AVVISO IMPORTANTE!

Fare attenzione a non invertire le polarità effettuando la connessione dell'alimentazione all'impianto, altrimenti il quadro comandi non si accende, l'impianto non funziona e si potrebbero verificare danni irreparabili ai moduli dei compressori.



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